THE

POLITICAL ECONOMY OF WAR

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BY

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AUTHOR'S NOTE

THIS book is a revised version of one published in 1921 and long since out of print. Topics, which, it might have been hoped, would never again occupy our minds have become once more of dominating interest, and are here discussed anew in relation to a conflict in which the economic factors may be expected to play a decisive part.

A. C. P.

November 1939

Già si solea con le spade far guerra;
Ma or si va togliendo or qui or quivi
Lo pane che il pio padre a nessun serra.

Dante

CONTENTS

PROLOGUE

FROM the time of Adam Smith British economists have studied the working of economic processes in normal conditions. They have watched a nation of many million persons regularly clothed, fed, housed and amused, not as the result of some tremendous piece of deliberate organisation, still less by the separate effort of each person or family directly furnishing his own needs, but by an extraordinarily complex system of mutual exchange built round the motive of private money profit. This scheme of things has, of course, grave flaws; it involves great waste; it has meant for very many human beings weariness, discontent, hunger and pain. But the system works! To probe the mystery of that miracle, to understand *how* it works, what exactly is the mechanism of it, and how the human forces behind the mechanism guide and control it, is a task to which able men have devoted their lives. Their hope has been that, by carrying out well and truly this task of positive analysis — this economic anatomy and physiology — they might help other men, better trained than themselves for the practical work of government and administration, to fashion remedies or palliatives for the many evils they descry. This task was still far from finished when, a quarter of a

century ago, there came a change. In the four years that ended on November 11, 1918, the unconscious processes of normal life were abandoned, and Europe swung reeling to the conscious agony of war. It has never been any purpose of mine to paint the unimagined horror of those fearful years. That work is for the historian and the poet of a later age. For him the clear heart, the human sympathy, the pity, the grace, the tears! For the economist these years furnished a task much humbler, but one, nevertheless, which it was right that he should try to accomplish. They set out in strong relief, against the cool rhythm of a settled order, the strained and stressed economy of world-shattering war. What was the anatomy and physiology of that economy? How did the structures that had grown up in another environment and had adapted themselves to other ends respond to the new calls made upon them? To the Political Economy we had read hitherto there was needed a companion volume, the Political Economy of War. Some pages of this I tried to write in 1921, partly in general terms, partly with more special reference to the experience of this country. At the end of my Introduction I said: "If I succeed in any measure, some complex issues should be resolved and some confusions cleared away. Perhaps, too, a little light may be thrown on what, if the human spirit is to remain sane and civilised society to endure, is the only political economy that will ever again have relevance to practical affairs, the Political Economy of permanent and assured peace among the great nations of the world." That hope has

crashed in ruin. Now again in 1939 the world is tearing itself to pieces, and the political economy of war becomes a matter of living interest. I am, therefore, writing this new book, which is in the main a revision of portions of the old one. It does not discuss at all the problems of transition from a peace to a war basis. These for the most part are concerned with matters of administration, in which I have no competence. Nor is anything said about unemployment. For, though in the process of transition considerable unemployment is bound to come about, nothing can be more certain than this; that, once the war effort has got into its stride, unemployment, for all practical purposes, will have disappeared.

THE husbandman does leave his plough
  To wade thro' fields of gore ;
The merchant binds his brows in steel,
  And leaves the trading shore ;

The shepherd leaves his mellow pipe,
  And sounds the trumpet shrill ;
The workman throws his hammer down
  To heave the bloody bill.

. . . . .

And on the verge of this wild sea
  Famine and death doth cry ;
The cries of women and of babes
  Over the world doth fly.

William Blake

CHAPTER I

THE SHADOW CAST BY WAR

1. The Political Economy of War has two preliminary chapters. One of these deals with the shadow — the reflection in the economic structure and policy of normal times — that war casts before itself; the other with the influence which the economic structure and policy of normal times exercises in making the outbreak of war more or less probable. Let us begin with the shadow that war throws on peace.

2. First and most obviously, the menace of possible war makes necessary the upkeep of armies, navies, air forces and munition works. This involves annually the withdrawal from ordinary productive industry of a large number of men above the average level of physique, of much intelligence, of organising and inventive power and of many ingenious machines. Where conscription is in force, it may be urged, in mitigation of this, that one or two years' service with the forces provides some measure of general training that promotes efficiency in industry afterwards; and also that the arrangements sometimes made for reducing the service period for young men who attain a certain standard

in examinations stimulates them to make the best use of their schooldays. These pleas are urged in rebuttal of the charge that military service is, from the industrial point of view, pure waste. Where a voluntary standing army is relied on, and, instead of the bulk of the population passing through the military machine for a year or so, a relatively small number of men are held to it for the main part of their lives, they are, plainly, of little force. Moreover, even under the short service system an important distinction must be drawn. It may reasonably be held that army training from, say, 19 to 21 years of age makes men more fitted for industry than they were at 19. But this is a very different thing from holding that it makes them more fitted for industry than they would have been at 21 had the two preceding years been devoted to employment in industry. Two years of military service may make a man a better carpenter than he was before the two years started, but hardly than he would have been after two years of carpentering. Thus, whatever benefit to future efficiency may result from military training is probably more than outweighed by the loss of the corresponding benefit that would otherwise have resulted from industrial experience. It cannot, therefore, properly be set against the direct loss of product that the withdrawal of people from two years of industrial work involves.

3. When service in the army, navy and munition works is voluntary, so that the pay for sailors and soldiers must correspond roughly to that accorded to men of similar capacity in civil life, the proportion

of the country's real resources annually withheld from 'production' on account of the fear of war is roughly equivalent to the proportion that the expenditure of the departments entrusted with national defence bears to the aggregate money income of the nation. Of course, this is a very different thing from the money income of the government. When the Brussels Financial Conference of 1920 stated that, on an average of all the countries brought under review, "some 20 per cent of the national expenditure is still being devoted to the maintenance of armaments and to preparations for war",[1] this did not mean that 20 per cent of the net money income of the various countries was so devoted. National expenditure was used to mean expenditure of national governments, and did not include the expenditure of people on their private needs made otherwise than through government. The figure required to give the proportion of aggregate real income or productive power that is annually used up in preparations for war must, therefore, at that time have been much less than 20 per cent. With existing statistics it cannot, even for this country, ever be determined accurately. In 1913, the money income of the United Kingdom as a whole (not the revenue of the government) used to be put by statisticians at something between 2000 and 2400 millions, while the expenditure on the army and navy was a little under £80,000,000. The required figure would, therefore, seem to have been between 3 and 4 per cent, that is to say, the equivalent of about a fort-

[1] *Report*, p. 11.

night's work of the brain workers, hand workers and mechanical equipment of the country every year. For France and Germany such statistics as exist suggest that the proportion in terms of money was about the same; but it must be remembered that in conscript countries the pay given to soldiers is likely to be lower relatively to the market value of their services than it is in a country in which military service is voluntary. During the post-war period these proportions have, of course, varied from time to time, but, for this country, until rearmament was undertaken in earnest, the proportion does not seem to have risen above 4 per cent.

4. At first sight such a figure as that may seem surprisingly small. It must be remembered, however, that the income on which it is based is total income, and not, in any sense, surplus income. In 1911 the average income per family of the 10 million householders (of $4\frac{1}{2}$ persons) in the United Kingdom was probably not more than £210. This does not leave much margin for national luxuries. As Dr. Bowley wrote in his book, *The Division of the Product of Industry*: "The wealth of the country, however divided, was insufficient before the war for a general high standard: there is nothing as yet to show that it will be greater in the future".[1] In 1937, according to an estimate made for me by Mr. Rothbart, assistant to the lecturer in statistics at Cambridge, the number of households was about 25 per cent larger, the average number of persons per household about $3\frac{2}{3}$, and the average income per

[1] *Loc. cit.*, p. 58.

family about double what it was in 1911; but prices were, of course, substantially higher, say half as high again, as in that year. These figures do not, of course, profess to be other than very rough. Among other things, it should be noted that in the estimate of number of *households those* in Southern Ireland were included in 1911, but in 1937 those in Eire are not included. In the light of these facts the withdrawal of 4 per cent from the total income assumes a more serious aspect. It is equivalent to a much larger percentage reduction of the 'surplus income' that is left over after the absolutely indispensable needs of individual life — apart altogether from any need there may be for new accumulations of capital — and of government administration have been satisfied. Suppose that in the United Kingdom it was 15 per cent of this surplus income. In France, Germany and Italy, where the income per head is substantially less than in the United Kingdom and the proportion of it absorbed by essential needs higher, the figures corresponding to this 15 per cent would certainly be much bigger. The shadow of war has never involved for this country so heavy a burden of real sacrifice as it has thrown on continental States.

5. It is not, however, only in the direct cost of armed forces that the shadow of war makes its influence felt. The history of the United Kingdom affords examples of opulence having to be sacrificed to indirect preparations for the recruitment and equipping of these forces. Thus, the Navigation laws, which excluded foreign merchant ships from

our coastal trade, had the double object of training up in peace time seamen who could be used in war and of securing a large supply of British merchant vessels convertible at need into fighting ships. The first of these objects even now stands behind demands for limiting the employment of foreigners on British merchant ships and for imposing disabilities on alien pilots. With the divorce in structure between war vessels and ordinary ships that came about as a result of modern invention, the importance of merchant ships as potential war ships diminished; though the Admiralty still give a subsidy to certain fast liners on condition that they should be so built as to be capable of conversion into auxiliary cruisers. In what we may still call the Great War merchant ships, in their proper function of merchant ships, were shown to be an essential element in national defence; and recently, when the motive of economic profit seemed unlikely to maintain for us a sufficiently large mercantile marine, the fear of war was a potent factor in compelling government to support the shipping industry.

The shadow of war, which is thus liable to be thrown upon sea transport, affects land transport also. Even in the United Kingdom there is a striking example of this. The project of a tunnel beneath the English Channel, which everybody agreed was economically very desirable, was for many years vetoed upon strategic grounds. On the Continent, and particularly in Prussia, military considerations played a larger part, and the course to be followed by a number of important railway lines was determined

with regard to the need of throwing masses of troops quickly to the frontier.

Transport through the air also has been twisted somewhat from a normal development by the requirements of war. The law of the air has been partly framed with a view to preventing espionage over fortified places. So far as governments exercise control over the design of commercial aircraft, it is not likely that they have left entirely out of account the possibility of converting these craft from goods carrying to the carrying of bombs. So far as they have a voice in preparing air routes and determining the situation of aerodromes, they have not — and, indeed, they ought not to have — disregarded facilities for quick concentration against a possible foe and the security of repair shops and manufacturing plant from hostile air attack.

It is, of course, impossible to say to what extent the sort of defence considerations that I have hinted at may have injured or are likely to injure the opulence of this or any other particular country by rendering its sea, land and air transport systems less efficient instruments of communication in normal times than they would have been if war were as dead as duelling. There is, however, a strong presumption that any interference with the free play of economic forces, designed, not to make good some failure on the part of those forces to promote economic welfare, but to forward a non-economic end, will, in one way or another, divert resources from more to less productive channels, and so will make the country *somewhat* less well-off than it

would have been if the claims of defence had been silent.

6. We have now to consider a matter which is especially important to the United Kingdom — the shadow that possible future war throws upon agriculture. The United Kingdom is normally dependent for a large part of its food supplies upon imports. In 1934, about one half our total supply (in weight) of meat, 84 per cent of wheat and flour, 91 per cent of butter, 38 per cent of eggs and 62 per cent of sugar were imported.[1] Broadly speaking, in spite of the reversal of fiscal policy which took place in 1931, this arrangement has developed under the ordinary play of economic forces. It has been found that we can get far more wheat and other articles of food for a given amount of work of our men and machines if we get it indirectly in exchange for coal and cotton goods than if we grow it for ourselves. In a world of assured peace there would be very little ground for interfering with this arrangement. There are, of course, serious social disadvantages in what is called the depopulation of the countryside; but it is perfectly possible so to arrange things that a large part of the population live in rural surroundings, even though they are engaged in industrial, and not in agricultural, work. Where there is a risk of war, however, reliance on imported food is dangerous, because imports of food may be cut off: and, though, as experience has shown, it is practicable to add appreciably to the food output of the country at

[1] Cf. Orr, *Food, Health and Income* (2nd Edition), Appendix 3, p. 60.

short notice, it is not practicable at short notice to make the United Kingdom independent, or anything like independent, of imported food. Consequently, in a world liable to war, it is a vital issue whether we should rely for our food supplies on normal economic processes or should sacrifice some of the advantages, which these processes give to us in peace, in order to provide an insurance against the risks of war. Some measure of insurance might be secured by holding permanently great stores of wheat — sufficient, for example, to supply our needs for a year — in national granaries. The same grain would not, of course, be held in these granaries continuously. What was wanted would be taken out at one end and new supplies pouréd in at the other. But the same *amount*, or, rather, not less than an agreed minimum amount, of grain would be held continuously. Plainly an arrangement of this kind would be expensive, and plainly, too, it would only be effective against a short war. But, as a measure of partial insurance, some case can be made out for it. An alternative method is for the government, by bounties, guarantees, duties or levies upon imports and so on, deliberately to divert the productive powers of the country towards the development of agriculture instead of industry in sufficient measure to enable us to dispense, at need, with imports of food. There can be no doubt, however, that this policy, if carried far enough to be effective, would be extraordinarily costly. Moreover, since an enormously enhanced agricultural output would involve an enormously increased need for fertilisers, it might

easily, when put to the test, break down; for, fertilisers have largely to be imported, and in war they are liable to be cut off.

7. Next there are to be considered certain industries engaged in the manufacture of materials and instruments which would be urgently needed for munition-making if war broke out. The iron and steel industry, the engineering industry, certain chemical industries, and the industries of iron-mining and coal-mining are of this kind. Yet again, other industries, though they do not themselves make things directly serviceable for war purposes, yet use plant that it would be possible, at need, to adapt very quickly for manufacturing such things. Thus yards established for merchant shipbuilding can be turned over to make warships, and the plant of dye-works to make explosives. If a country relies on foreign engineering work and foreign imports of iron ore, the cutting off of imports would greatly handicap it in maintaining its output of munitions. In the same way, if it has no works that can be readily adapted to making warships or explosives, it will be in a much weaker position for carrying on a war, should it suddenly find itself unable to import them from abroad, than it might have been. For these reasons, the fear of war may induce the government of a country, to which one or another of these industries is not naturally well suited, and in which, therefore, it would not, in the normal course of things, be well developed, to stimulate its growth by various artificial encouragements. When a government does this, just as when it protects agriculture

on military grounds, it imposes on the nation a continuing economic loss, due to the diversion of its resources into relatively unproductive channels, as a kind of insurance premium against the risks of war. If the policy is carried far enough to be effective, the costs are likely to be high and the real sacrifice involved large.

8. There remain 'key' industries. Sometimes this term is loosely used to cover all industries that are important to the economic well-being of the country — to include, for example, such industries as engineering and textiles. It seems better, however, to keep the term for industries that really are 'key', in the sense of being small and of relatively low value in themselves, but, nevertheless, essential to enable large and important industries to work. Examples of key industries in this sense are magneto-making, without which motor-car production is paralysed, the dye industry, which is essential to the finishing of textile fabrics, and the optical glass industry, which is similarly essential to the finishing of many scientific instruments. Some industries of the key class are keys to munition-making industries, some to industries that have no direct relation to war, some to both kinds. Their distinguishing characteristic is that the importance of their product is exceptionally large relatively to its money value. That is to say, if £100,000 worth of key goods were cut off (values being calculated at the prices ruling before the cutting off took place), the country would suffer much greater real loss than if an equal value of a non-key article, of which normally about an

equal value is consumed, were cut off; for it would indirectly be prevented from using the special aptitudes of the men and machines trained to make the things to which the key goods are essential. It follows that the case for stimulating home production by bounties, guaranteed prices or protective duties, as a defence against war risks, is much stronger as regards true key industries than as regards other industries of equal money value. When the key article is a speciality of a single country likely to become an enemy, and when, therefore, the danger that the importation of it will be completely stopped in war is great, the case is stronger than it is when there are several foreign sources of manufacture.

9. The foregoing analysis, it may be objected, has assumed that the labour and capital which are pushed by government action into certain industries on account of war fears, are taken away from industries in which they would otherwise have been engaged at greater economic advantage; whereas in fact this labour and capital might otherwise have been unemployed. If we were confining ourselves to a very short view, this objection would be valid. In peace time, except at the peak of a boom, there are always a number of unemployed work-people who might, in theory at least, be put to work in industries which the government wishes to stimulate. But in this matter it is not proper to confine ourselves to short views. When, as a more or less permanent policy, a government encourages particular industries the whole set-up of the economic

system adjusts itself to that fact. In general and apart from special circumstances there is no reason to suppose that unemployment in the aggregate can be made smaller by stimulating a particular set of industries. The reason is that the number of men *attached* to the stimulated industries tend, if the stimulus is permanent, to expand in a similar proportion to the number employed there. Thus, when we are considering the broad consequences of continuous government encouragement to particular industries, it is proper to reckon that, over good and bad times together, aggregate employment of labour and capital will be unaffected. That is to say, whatever expansion the stimulated industries undergo is at the expense, not of an idle reserve, but of employment in other industries.

10. What has been said in the preceding paragraphs should have served to indicate the nature of the problems which the danger of war raises. It is not my purpose to set out or defend any conclusion on the political issue whether or not one or another method of insurance against this or that kind of shortage in war ought to be adopted by this country in peace time. What insurance premium a prudent man will pay to safeguard himself against any evil depends on a complex comparison of the effectiveness of the insurance offered, of the chance that the evil he wishes to guard against will occur, and of the amount of the injury he will suffer if it does occur. Such an issue can only be settled on the basis of elaborate and detailed study of all the relevant conditions that prevail at the time decision is called for.

Here we are concerned with the point of principle only. In a world liable to war it may not only happen, but it may be wise, for a country to sacrifice something of opulence in normal times in order to protect itself against a shortage of food or other essential goods should war break out. If the shadow of war were removed, this sacrifice of opulence to defence would not be required.

CHAPTER II

ECONOMIC CAUSES OF WAR

1. I PASS now to the second preliminary matter distinguished on page 5, namely, the influence which the economic structure and policy of normal times exercises in making the outbreak of war likely or unlikely. This is a large subject on which there has been much discussion. What I shall say upon it here can only be brief and summary.

2. The immediate occasions of war are manifold and, maybe, trivial — an " insult to the flag ", the murder of an official personage, the rash act of some panic-stricken commander of troops or warships, the falsification of a telegram by some astute diplomatist. But these occasions are not the causes of war. They are the match to the powder magazine. The real fundamental causes are those that lie behind the assembling of the powder. In the last analysis these are two in number, the desire for domination and the desire for gain.

3. The desire for domination for its own sake, apart from any economic advantages it may confer, is a real and effective motive for action. The English schoolboy who asserts himself by bullying smaller boys, the self-styled Aryan who bullies

Jews, the white man in tropical countries who exacts special marks of respect and subordination from his ' inferiors ', all at bottom are displaying a desire for domination. There is no doubt at all that the average Englishman or Frenchman does have this sort of desire; and, moreover, feels that it is somehow gratified by the fact that he is a citizen of a ' Great Power ', not of Holland or Switzerland or Spain. In 1914 and again in 1939 many Germans have really desired their country to hold Europe in a thrall of fear, and to hear their country's sabre rattling behind its diplomacy. It does not happen, indeed, that modern nations go to war for the avowed purpose of discovering which is " the better man ". But this element is certainly present in their rivalry. Furthermore, the desire for domination makes nations extraordinarily unwilling to relax their hold on any territory they have come once to ' possess '. They are humiliated, outraged, dishonoured if a subject population passes out from their yoke. For continuing to hold these peoples against their will, ruling Powers have offered many reasons — their duty to civilisation, the white man's burden, the need for a strategic frontier and so forth. These reasons are often put forward sincerely; sometimes they are sound; but, in addition to and behind everything else, there is the will of dominant Powers to continue dominant. Against that clashes the will of the dominated to be free. There is the seed of wars of liberty, of irredentist wars, of wars of nationality! This explosive force has little to do with economics. It is outside the scope of this discussion,

but it is none the less real. To ignore it and to seek an exclusively economic interpretation of war would be to neglect evident truths. The desire for gain, whose subtle workings are the subject of study here, is not the only ferment that makes for international war. It is important, in concentrating attention upon it, not to forget that the part it plays is limited.

4. Civilised nations do not go to war with one another with the avowed and direct purpose of loot. It is *not*, indeed, as was sometimes urged before 1914, in the nature of things impossible for a victorious nation to make an economic profit by exacting a war indemnity. An indemnity is equivalent to the wiping out of a foreign debt or to the receipt of a foreign loan on which no interest need be paid. It may, of course, happen, if the indemnity is received all at once in a form unwisely chosen, that industry will be disturbed and incidental damage suffered in the process of adjustment. But to assert in a general way that a nation which receives an indemnity *must* suffer a net economic injury from it is to uphold a paradox. It will generally gain, just as an individual will gain if somebody gives him a present. So soon, however, as this is admitted, it follows that the amount of the gain *may* be greater than the cost of the war through which it was won. This must be fully acknowledged. Nevertheless, in view of the enormous expense of modern military and naval operations, and of the chance that a war begun on a small scale may draw in other Powers, it is extremely *improbable* that there will be to any country

in the end any balance of economic gain. For a government to enter on war in the hope of such a gain would be a colossal stupidity as well as a colossal crime. This is so far recognised that wars motived by the hope of loot in the form of huge indemnities are not practically to be feared. It is not in this crude way that economic influences foster modern war.

5. The traders of industrialised countries naturally desire profitable markets for their goods. Owing to the general vogue of protective and preferential tariffs they often find themselves exposed, in territories controlled by governments other than their own, to fiscal handicaps as against the citizens of the controlling governments. Consequently, as a safeguard against these handicaps, they prefer to see as large a part of the world as possible controlled by their own government. Having secured this much, they reflect that the situation would be still further improved if their government could be induced to place a fiscal handicap in the way of their competitors. There is thus in many countries a tendency on the part of traders and manufacturers interested in exportation to favour self-assertion by the government of their country in regions where expansion or the earmarking of spheres of interest is feasible without too great risk. Manufacturers of goods, the raw materials of which come from tropical lands, may also expect a greater complaisance in satisfying their wants in regions controlled by their own, rather than by rival, governments. They, therefore, tend to back up the traders interested in exportation.

When the amount of trade actually done by civilised countries with the regions of Africa and Asia controlled by them is compared with the amount done with regions politically outside the range of their influence, it is, indeed, apparent that the economic prize that merchants and manufacturers have looked for is not a great one. This is the more obvious when it is recalled, first, that the figures of exports and imports measure, as it were, the *turnover*, and, therefore, very greatly exceed the *profit* of the trade; secondly, that the absence of national control, though it might involve a reduction, certainly would not involve the disappearance, of national trade (and the resultant profit) from controlled regions; and, thirdly, that the manufacturing and trading activity directed to any particular market is never a net addition to the aggregate manufacturing and trading activity of a country, but is, in great part, a mere diversion of it from other markets or other products. These considerations suggest that the eagerness of manufacturers and traders to support policies of expansion in the search for markets is based on an imperfect realisation of the economic consequences of these policies. But, however this may be, the fact remains that many manufacturers and traders do believe that political imperialism is, or may be made, a great factor in benefiting trade and industry. This belief they succeeded over many decades in imposing upon the governments of the United Kingdom, France, Italy, Germany, Russia and Japan. Since the same territory cannot be controlled by two governments at the same time, the necessary result

has been competition and diplomatic contests among these governments.

6. It is not, however, chiefly as agencies for promoting the trade of their nationals in relatively undeveloped parts of the world that European governments have come into conflict with one another. They have also been pushed forward towards imperialism by the influence of financiers in search of profitable concessions. Here the gain to be looked for is larger. There are openings for highly profitable investments in loans to weak governments whose officials can be bribed or cajoled, in building railways for such governments on favourable terms, in developing the 'natural resources' of oil fields, or in establishing rubber plantations on land taken from Africans and worked by the forced or 'stimulated' labour of Africans at a very low wage. When the government of some civilised country has annexed, or is protecting, or has established a sphere of influence over, any undeveloped region, these valuable concessions are apt to flow, even when they are not formally reserved, to financiers among its own nationals. These financiers are often rich and powerful. They have means of making their voices heard through newspapers, of influencing opinion and of putting pressure on governments. In Mr. Woolf's book on *Empire and Commerce in Africa* there is a lurid account of the methods they sometimes employ. It is not my business to go through that sordid tale. All that is important here is that the desire for gain through concessions, as well as, and more powerfully than, the desire for gain through

trade has impelled civilised governments into a competition for influence and control in relatively undeveloped regions of the world.

7. This competition means diplomatic backing by governments of their traders and concession-seekers in weak States, coupled at once with attempts to acquire spheres of influence, protectorates or annexations for themselves and with resistance to similar attempts on the part of others. Thus, the rivalry of the traders and financiers of different nations leads to a contest among their governments for "places in the sun". In this contest allies and associates are helpful, and so the area of contest is extended. In the background of it all stands military power. No government wants to fight for a sphere of influence or a concession for its nationals, but every government knows that, unless there is some point at which people believe that it will fight, its diplomacy will be relatively ineffective; and it knows too that, once it enters upon a game of bluff, the bluff may unexpectedly be called. In this way the economic interest of private persons, reacting upon the policy of governments, piles up further explosive material alongside of that already prepared by desires for and resistance to political domination.

8. Moreover, there is one private economic interest which operates in a peculiar manner. This is the private interest of makers of armaments. These persons wish to sell their goods. It need not be suggested that any among them are so callous to human suffering as to desire actual war for that end. But they certainly desire preparations for war. If

they can persuade one government that another government is arming against it, they may obtain a lucrative order for ships or guns. The leading armament firms of different countries do not limit themselves to supplying the needs of their own governments, nor are they wholly independent of, or dissociated from, one another. It is to the interest of all of them to promote war scares and international competition in armaments. If they can induce one government to buy from them some new instrument of war, this of itself affords them a powerful lever with which to induce other governments to do the same. They are not without influence in the press, and, through the press, on public opinion. It is not necessary to assume that the persuasion they exercise is corrupt, or that they deliberately disseminate false alarms. It is enough to know that they find a profit in stimulating the purchase of armaments; that, so far as they succeed, mutual suspicions and mutual fears among governments are fostered; and that thus the explosive material, out of which the flame of war may burst, is piled higher.[1]

9. This explosive material, we may next remark, has a peculiar quality. Once piled up under the several influences I have described, it tends, like a living thing, to grow. The fear of war itself forces governments to adopt policies that make war more likely. If there were no fear of war there would be no purpose in achieving strategic frontiers. One of the objects sought in conquering African colonies,

[1] For a powerful discussion of this matter cf. *The Private Manufacture of Armaments* by P. J. Noel Baker (1936).

namely, the recruitment of black troops, would exist no longer. Two of the grounds for refusing independence to subject populations desirous of independence, namely, the desire to draw soldiers from them, and the desire to prevent rival nations from drawing soldiers from them and using their territory as the base for an attack, would also disappear. But the search for strategic frontiers, the absorption of uncivilised regions rich in potential conscripts, and the refusal to set subject peoples free are important factors in building up the warlike mind. Nursed by the fear of war, they themselves make war more likely and are the cause of further fears.

10. So far attention has been confined to sorts of economic activity that promote conditions of war between governments. Naturally there are also important economic factors making for peace. The great nations afford very important markets for one another's goods, and people do not wish, if it can be avoided, to fight with their customers. Moreover, trade and travel and the development of means of communication promote an improved understanding of one another in the peoples of different countries. It was the hope of Cobden and his friends that increasing freedom of trade among nations might go hand in hand with increasing friendliness and ever-diminishing danger of war. That hope has not been fulfilled, but it was, none the less, a reasonable hope. Moreover, besides the co-operation of individual citizens of different nationalities in trade, there is also scope for co-operation among governments in

connection with economic interests extending beyond the range of single States. Of this kind of co-operation the international postal convention affords the classical example. Under the aegis of the League of Nations more and more occasions for joint economic effort have been found and utilised. This might well have been expected to lessen international rivalries and jealousies, to make possible diminished armaments, and so to lessen that fear of war, which is, both directly and through its indirect influence on policy, one of its principal causes. That these forces making for peace have been overpowered is not a proof that they are feeble, still less that they are unreal.

CHAPTER III

RESOURCES AVAILABLE FOR WAR

1. The real resources possessed by any country consist of the mental and manual power of its people, of its land and mineral deposits, of its material capital of buildings, plant, railways, ships and stores of goods, of its immaterial capital of 'organisation', and of the legal rights of its citizens to payments from foreigners. In the normal political economy of peace these various resources are conceived as being engaged with a certain rhythmic regularity in producing the national dividend, or national real income, of successive years. Economic analysis and the study of proposals for social reform centre upon the magnitude, the distribution among people, and the variability in time of this national dividend. In stationary conditions a country's resources would, after making good the wear and tear of capital equipment, produce every year about the same volume of dividend, the whole of which, whether in the form of goods or of services not embodied in goods, would be consumed. In progressive conditions a portion of the dividend would take the form every year of some addition to the capital equipment, making possible the production of a rather larger dividend

in the future. In stationary and progressive conditions alike a country's resources would not be worked at the maximum imaginable intensity, and would not, therefore, yield the maximum imaginable dividend, partly because people want leisure as well as things, and partly because (at least in progressive conditions) changes in the direction of demand continually call for readjustments in the machinery of production, so that it is always in some measure out of gear.

2. In time of war the fundamental human and material resources of a country are, of course, the same as in time of peace. But they are swung into different channels, and the centre of interest is changed. Thus, whereas in normal times we are concerned with the amount of goods and services that a country can produce regularly while its people enjoy their normal amount of leisure, in war we are concerned rather with the amount that it can squeeze out for immediate use in the actual processes of war. When the normal income-producing power of the country is given, there are four principal sources from which this amount — the real war fund, as it were — can be drawn. These are: (1) augmented production, (2) reduced personal consumption, (3) reduced investment in new forms of capital, and (4) depletion of existing capital.

3. The scope of augmented production depends upon the amount of slack, as it were, that the country is able to take up. The most obvious form of slack is that represented by unemployment. In normal times the shifts of public taste among different sorts

of goods and — more important — the oscillations of opinion among business men about the prospects of investment, in ways, some direct and some devious, render unemployment in a measure endemic. For a long period before 1914 the percentage of unemployment in this country, as recorded by trade unions, was, on the average of good and bad times together, some 4½ per cent. In the post-war period, full allowance being made for changes in methods of record, the average percentage has been between two and three times as large. By way of contrast, during the war years themselves, the figure was negligible, never rising after April 1915 above 1 per cent. The nation's effort was concentrated on a single aim, and the government's need for munition workers was so enormous and so well-advertised that anyone out of a job knew at once where one could be had. It is of interest to observe that, whereas in July 1914 the unemployment figure was 3·6 per cent, in August 1939 it was (on the new reckoning) 8·6 per cent, to which level it had recently fallen from over 12 per cent. In this country, therefore, at the beginning of the new war the slack available to be taken up through absorption of the unemployed is *prima facie* much larger than it was a quarter of a century ago. In Germany throughout 1939 there was practically no unemployment.

Another important way in which slack can be taken up is by reduction of leisure. In most 'advanced' countries there are a certain number of people, both men and women, who are accustomed to do no work at all, or only a nominal amount of

work, to live on private means or on the earnings of other people, and to spend their lives in sport, games, social functions, travel and amusement. These people may be drawn into the ranks of active workers whether in the army, in the hospitals, in industry, or even in taking the place of servants in their own houses. Along with them come a number of elderly persons, who, in the ordinary course of events, would have retired from industry for the closing years of their lives, but who, in fact, carry on or return to it. Some boys and girls too may be drawn into industry at an age earlier than is usual. Moreover, it is not merely through an increase in the number of workers that extra work may be forthcoming. Men and women, who are accustomed in normal times to work with ordinary intensity for ordinary hours, may work much harder and more continuously. It is, of course, true that work carried on at too high a strain or for too long hours means not an increased, but a diminished, output, and that in the earlier days of the Great War the hours worked in munition-making industries were often unproductively long. Nevertheless, there is little doubt that many persons can, at need, do more work than they are accustomed to do in normal times, and, as a result, can produce, and continue for a long period to produce, more goods.

The additions to productive power which I have just been describing are, of course, in large part called out by the direct action of patriotic sentiment. Volunteers flow into the army and munition-makers readily accept long hours, just as a family would do

which suddenly discovered its house burning and in crying need of salvage. With patriotism there may be combined direct or indirect coercion upon individuals to render a tribute of work. This coercion brings into the national store working power over and above what patriotism would send there. Direct coercion is most fully exemplified in the conscription of men of military age into the fighting forces. Indirect coercion operates through heavy taxation, either overt or concealed. This, by threatening their standard of life, may drive people to strive for larger incomes. To this end those who are in no way moved by patriotic enthusiasm may be willing to work longer hours or to step into some kind of industrial pursuit from a life of leisure or retirement.

We have not, however, exhausted the ways in which industrial slack may be taken up and the volume of productive effort increased. In normal times there are apt always to be a certain number of stoppages of work due to disputes between employers and employed. These stoppages involve a loss of productivity, not merely in the industries in which they occur, but also in other industries that use the product of these industries as raw material or are otherwise connected with them: for a stoppage in one part of the machinery of industry throws other parts also out of gear. In war time stoppages of work are liable to be greatly cut down in range and importance by the patriotic desire of employers and employed to do nothing to hinder victory. They may also, if need arises, be directly prohibited by

legal enactments that in normal times public opinion would not tolerate.

What these various forms of industrial slack capable of being taken up in war time amount to statistically it is impossible to say with any accuracy. Not merely are the available statistics inadequate, but also, even if they were not, any figure averaged out from them would depend in part on an arbitrary choice of definitions. Nevertheless, to give some idea of the order of magnitude involved, we may perhaps guess that for this country, when war is fully engaged, the total increase of productive power at work, as against recent times, will amount to some 20 per cent. To that extent resources could be turned to war without the volume of non-war service being reduced or any draft being made on capital.

4. Let us now turn to the second source out of which a war fund may be built up, namely, a reduction in personal consumption on the part of the public. Obviously, if people eat less, travel less, go to fewer theatres, make use of fewer servants, burn less coal and so forth, they set free resources, which are turned in normal times to satisfying their personal wants, to satisfy instead the war needs of the State. For, as has already been argued, in a full-fledged war there can be no question of these resources being simply put out of work. In a later chapter various sorts of personal economy will be studied in detail and their comparative effectiveness as means of augmenting the national war fund will be examined. For the present, there-

fore, it is sufficient to assign to them in a general way their place as one of the four main sources from which the real national war fund may be drawn.

5. At this point attention may be called to a possible confusion of thought. There is danger, in a superficial study, of regarding as *additional production* for war use something that is really a *diversion* to war use of resources normally devoted to private consumption. This mistake is especially likely to be made with reference to women's work in war time. During the Great War in the United Kingdom, as in other countries, an enormous number of women flocked into industry. Many were engaged directly in munition-making, and many in occupations — railway service, for example — from which men had been withdrawn for military service. At first sight it is natural to regard these extra women as a net addition to the productive power of the country. This, however, is a mistake. A large proportion of the women who entered industry for the war period were withdrawn from domestic service. In so far as they worked harder at munitions than they had worked in that service, the aggregate productive effort of the country was, no doubt, increased. But that part of their industrial activity which corresponded to their former domestic-service activity was not an addition to productive effort. It was a transfer from work in the service of private consumption to work in the service of the war. Again, many of the women who came into industry had been engaged previously in work in their own homes.

The services rendered by them in this work were a part of the nation's productive effort, and must be set against the services rendered by them in war industry before the net addition to production effort can be arrived at. A further complication is introduced by the fact that many of the men, for whom women had been managing homes, were taken into the army. As a rule they no longer needed homes managed for them, but their food had still to be cooked and other services of this class rendered. Strictly, it would seem, in order to get the net addition to productive effort due to the movement of women into industry, we ought to subtract the services rendered by cooks and other such persons within the army itself. This is, of course, a small matter. It is not, however, a small matter that a substantial part of women's industrial work in war time represented, not an addition to the productive power of the country, but a diversion of existing productive power from personal consumption to war service.

6. The third source of the real national war fund is reduction in the volume of resources turned to new investments — other, of course, than war investments. If a man builds a house or a factory or uses exports to buy a house or factory abroad, or if a public department puts up a new school or a new gasworks, resources are thereby diverted from making or serving instruments of war. Economy in making new non-war investments may permit of a very large addition to war resources, because in most advanced countries considerable new investments

are normally made every year. In the United Kingdom before 1914 the aggregate of home and foreign investment together amounted every year to between 300 and 400 millions sterling. In 1937 it was, according to Mr. Colin Clark, nearly 500 millions, each £, of course, being of lower real value than a 1914 £.

7. There remains the fourth source out of which war fund may be created, namely, the depletion of existing capital. The most obvious form of this is the direct taking over for war use of particular capital goods. A portion of a country's capital is normally in the form of stores of consumable articles held in warehouses and shops on the way from manufacturers to ultimate purchasers. These stores can be drawn upon. The wheat stock of the country, for example, may be reduced from ten weeks' supply to three weeks' supply; and so on. Besides these stores of liquid capital, certain kinds of fixed capital can also be drawn upon. For example, in the Great War the output of new railway material for service in France was supplemented by taking up and shipping to France considerable lengths of railway track from certain English and Canadian railways. Most sorts of fixed capital cannot, however, be used in this way. Houses, factories, the greater part of the country's railway equipment, its mines and mining equipment, its land and its machines cannot be fired at the enemy or eaten up for his defeat. Hence, the extent to which a war fund can be built up by the direct use of bits of capital is limited.

There is, however, a second way in which capital

can be drawn upon. Instead of taking away and using concrete bits of it, we may absorb for war use resources that would normally be employed in maintaining it in good condition. The national dividend, or national income, as usually defined by economists, means the amount of real income available after enough has been set aside for renewals and repairs of equipment. In the United Kingdom it was estimated before the Great War that some 170 million pounds' worth of national effort was needed annually to keep the country's capital intact. For 1937 Mr. Colin Clark put the then figure at a little under 400 millions. There are certain difficulties connected with this conception; but it is not necessary to investigate them here. The point to be made is a very simple one. By refraining from normal repairs and replacements, by letting railway tracks get into disrepair, by keeping old and worn-out machines at work and by taking exhausting crops from the land without equivalent replacement by adequate manuring, further resources, over and above those ordinarily devoted to producing income, can be drawn in to swell the nation's immediate economic power in the face of war.

What has been said in the preceding paragraphs is applicable even to countries completely isolated from the rest of the world. When communication with outside nations is open, the opportunity for using capital for war purposes is much wider. Pieces of capital, that, from their physical nature, are incapable of being turned to war service directly, can now be so turned indirectly. They can be sold

to foreigners in exchange for munitions and raw materials. Different pieces of capital differ greatly in the ease with which this can be done. There is an important distinction between objects that can be transported outside the country to a foreign buyer and objects in respect of which it is only possible to transfer a title of ownership within the country. Gold and silver, jewellery and works of art can actually be shipped abroad if the seas are safe enough. If this is done the foreign buyer runs no risk. But titles of ownership over things that cannot be shipped abroad, whether country estates or shares in companies whose works are situated here, or the bonds of British local authorities, are in different case. A foreigner who buys these things runs the risk of finding his claim barred at the end of the war, should the nation with whose subjects he has dealt be overwhelmingly defeated. This kind of capital is, therefore, apt in war time not to find ready foreign buyers. There is, however, yet a third kind of capital that the citizens of a warring State may possess ; namely, holdings of securities issued by governments and joint-stock companies in neutral countries, whose industries are capable of making the things their own government wants for war, and in which, therefore, it is anxious to obtain purchasing power. These things citizens of the neutral countries will much more readily buy, and the munitions and materials purchasable with the proceeds of their sale may yield to selling countries a substantial supplement to their real war fund. During the Great War, as is well known, the dollar

and other securities held by citizens of the United Kingdom enabled us to buy an enormous volume of war supplies from America, not only for ourselves, but also for our Allies. At the present time, according to a recent estimate made by the *Economist*,[1] British holdings of overseas securities amount to some 1170 million pounds, of which 175 millions are United States securities. From 1915 to 1919 British-held securities mobilised by the government and used, some one-third for sale outright and some two-thirds as collateral for borrowing, amounted to 622 millions. "According to a conservative reckoning", the *Economist* writes, "it should be possible to mobilise total investments at least equivalent in value to those raised during the last war — and this in the absence of substantial holdings of American Railway securities."[2] The exact value of our holdings of gold is not known, but gold in the Exchange Equalisation Account at the end of March, 1939, amounted to 50 million ounces of a value, at 168 shillings per fine ounce, of 420 millions: while gold transferred into this account from the Issue Department of the Bank of England in September, 1939, amounted at the same valuation to 280 millions. From this total of 700 millions must be subtracted the gold lost since March, 1939, the amount of which has not been published. We may, however, fairly

[1] August 12, 1939, p. 347.

[2] *Ibid.* But it should be borne in mind that during the Great War, before the government scheme was introduced, private persons in England probably sold abroad a substantial value of foreign securities to turn the proceeds into war loans.

suppose that the total gold left is not less than, say, 550 millions. Thus, it would seem, our holdings of gold and marketable foreign securities constitute together a nest-egg of not less than 1100 million pounds, which could be used, if needed, for the purchase of munitions and raw materials from abroad.

Yet again, when international communication is open, it is possible for a country to turn its capital into income available for war in another sense; namely, by creating negative capital in the form of foreign loans. These loans may be obtained in some small measure by individuals whom foreigners are willing to supply with goods on long credits; they may be obtained by banks in the form of a deposit of balances by foreigners; they may be obtained by a belligerent government either through individual foreign subscriptions to its issue of war loan, or by foreign loans directly negotiated with a private syndicate or with the government of a foreign country. If there is widespread fear that the would-be borrowing country will suffer overwhelming defeat, loans of this kind will be difficult to raise, for the same reason that the securities of concerns resident in the country are difficult to sell in foreign markets. In the Great War the United Kingdom and its European Allies were enabled to secure a very much larger mass of them than would otherwise have been possible, because, after the entrance of the United States into the war, there was a powerful *political* motive for granting them, and they were in fact granted by the United States Treasury. In

the present war, as things stand (October 1939), the laws of the United States forbid loans to belligerents. From the standpoint of the borrowing nation, there is evidently no great difference between selling dollar securities held by its citizens and selling its own government's promises to pay. Under the former arrangement the subsequent flow of income into it from abroad is checked; under the latter the subsequent flow out of it to abroad is correspondingly augmented.

8. On the basis of what has been said, we may draw up on very rough lines a table of available war resources. First, the taking in of slack may provide annually real resources equivalent, perhaps, to 20 per cent of normal real income. The magnitude of the second item, that resulting from cuts in consumption, depends on how far the public as a whole are prepared to draw in their belts. For members of the well-to-do classes there is much scope for this; but unfortunately the number of well-to-do people is relatively small. For the great mass of the population there is little room for cuts if their health and efficiency and, above all, the health of their children are not to be seriously impaired. As a very doubtful guess, let us put what is available under this head at 20 per cent of normal incomes. New investment for non-war purposes could be cut drastically, but the upkeep and repair of existing capital, *e.g.* railways, must be continued to some considerable extent. Let us say, then, that under these two headings resources equivalent to one-tenth of normal real income could be turned annually to war service.

Thus, if our guess about consumption cuts is reasonably correct, we may reckon on being able to use for war the equivalent of something like one-half of our normal real income, or, to put the same thing into other words, of the productive power required to produce that. On the assumption that slack equivalent to 20 per cent of pre-war income is drawn on, one-half of pre-war income is five-twelfths of war income. In an excellent article in the *Economist* of September 30, 1939, the following passage occurs: "The gross national income in the year 1918, the last previous year of totalitarian war, can be put very tentatively at £5500 millions. In that calendar year the expenditure of the Exchequer (excluding loans granted to the Allies and similar capital transactions) was £2700 millions, of which about £2500 millions can be regarded as the cost of the war. Twenty-one years ago, that is to say, it proved possible to devote almost half the total resources of the community to fighting." Since our income-producing power per head is now substantially higher, we should be able to devote to war service a larger *proportion* than then, before the minimum requirements of non-war service are trenched upon. The fraction, one-half, seems therefore unlikely to be too optimistic a figure. To this annual provision must be added the nest-egg spoken of in the last paragraph, which is equivalent to, say, one-fifth of a year's real income, but which can, of course, only be used once.

9. Attention may be drawn in this connection to a further consideration of some interest and import-

ance. Our analysis of the sources from which real war fund may be drawn, into (1) augmented production, (2) economy of consumption, (3) economy of new investment and (4) depletion of capital, may be thought at first sight to provide a straight road to a further distinction, enabling us to separate ways of providing the real war fund that hit the present only and ways that, by rendering a country's capital equipment smaller than it would otherwise have been, hit the future. Extra work and economy of personal consumption seem to be at the expense of the present, economy in new investment and depletion of capital at the expense of the future. But no such simple division is really warranted, for two reasons. First, monies obtained by diversion from 'expenditure' are not wholly irrelevant to the future. There is such a thing as investment in human capital as well as investment in material capital. So soon as this is recognised, the distinction between economy in personal consumption and economy in investment becomes blurred. For, up to a point, personal consumption *is* investment in personal productive capacity. This is specially important in connection with children. To reduce unduly expenditure on their consumption may greatly lower their efficiency in after-life. Even for adults, after we have descended a certain distance along the scale of wealth, so that we are beyond the region of luxuries and 'unnecessary' comforts, a check to personal consumption is also a check to investment in capital interpreted broadly, and, as such, hits the future. Secondly, that part of the war

fund that is provided by augmented production will also, in some measure, strike the future. If a country at war carries extra work beyond a point, it draws in fact, though not in name, upon capital. It does this if it works any of its citizens in munition-making or other occupations with such intensity, or for such long hours, as to wear them out prematurely. It has already been pointed out that length of working day and intensity of effort carried too far defeat their own purpose by bringing about a diminution, instead of an increase, of output at the time. But there will be a stage before this, at which, though the extra hours and intensity improve output over the comparatively short period likely to be covered by a war, they damage it over the longer period covered by the working life of the people affected. This implies a using up of human capital. Again, a country may augment its available income by turning its boys and girls on to immediately productive work instead of leaving them to their normal period of school time and training. This corresponds to the device of augmenting available income by refraining from repairs and renewals of material capital: for the human capital of the country can only be kept intact if successive generations are trained up to take the place of their predecessors at a like level of educated capacity. These considerations make it plain that any attempt to distinguish with accuracy how far any fund for war has been provided at the expense of the present or at the expense of the future would encounter formidable difficulties. Nevertheless, as a rough and practical conclusion, we may reasonably

assert that, whereas resources obtained by using up existing capital or by refraining from the creation of new capital wholly hit the future, resources obtained by augmenting production or by diverting resources from the service of personal consumption, at all events in large part, hit the present.

CHAPTER IV

REAL AND MONEY WAR COSTS AND EXPENDITURE

1. THE sum of real resources available for war, as set out in the last chapter, does not, of course, measure the loss that a country which becomes engaged in war may suffer. In any attempt to compute this it would be necessary to take account of the enormous destruction of values outside the economic sphere altogether — the shattering of human promise, the accumulated suffering in wounds and disease of many who go to fight, the accumulated degradation in thought and feeling of many who remain at home — which war almost inevitably involves. Moreover, even if we keep within the economic sphere, it is evident that losses may be inflicted by direct enemy action on parts of the economic body of a country that are not, and perhaps could not be, directly mobilised for war. For instance, in a country invaded by an enemy, much private property may be destroyed in the actual operations of war. In a country which is not invaded, great losses may be inflicted upon many people through the interference with foreign trade which war involves. All this must be clearly recognised. The economic resources mobilised or

mobilisable for war do not bear any direct relation to the costs of war in the widest sense.

2. So much being understood, we may proceed to note that, in modern conditions, the mobilisation of real resources for war takes place under the aegis of governments, and is, in the main, both depicted in and worked through the organisation of State budgets. These budgets, though they do not represent in any significant way the losses of war, do therefore represent mobilised war resources, or what was called in the last chapter the real war fund. Both the money fund that appears in the government budget and the real war fund have, however, two aspects. The money fund is at once money revenue and money expenditure; the real fund is at once real costs and real expenditure. The two sums of money are, of course, identical. But what the money, as raised, represents is not identical with what the money, as expended, represents. The real costs consist in the services and things (including leisure) that people do without in consequence of the government's demand for money; the real expenditure consists in the services and things that the government buys with the money and actually uses in war. Behind both of these lie the real resources available for war, out of which they grow. Nevertheless, they are distinct. This distinction and others closely associated with it give rise to a number of difficulties and confusions, which it is important to clear out of the way.

3. As a preliminary it must be made plain that we are not here comparing, as we were in the last

chapter, the happenings of war and the happenings of normal times. We are studying the inter-relation of two aspects, the money aspect and the real aspect, of the war situation itself. Thus the real costs of war include the services of people actually engaged in war service, whether in normal times they would have been rendering peace service, or service (*e.g.* in the standing Army, Navy, and Air Force) preparatory to war, or would have been completely idle. In like manner the money costs of war include what is paid for war services irrespective of what would have been paid for war preparations had there been no war. Thus for our present purpose it is irrelevant how large aggregate money income is. It is irrelevant too that, had there been no war, many women who became engaged in paid war work would have been rendering in their homes unpaid services, not represented in statistics of money income, while some would have been rendering no service at all. Yet again it is irrelevant that the payments made to men called out of unemployment into war work have a partial offset in what would normally have been paid to them in unemployment benefit. We are thus absolved from the discussion of several awkward statistical conundra.

4. With due gratitude for this, let us consider, secondly, the relation between real costs and money costs. At first sight it might be thought that, whenever an individual pays over £100 to the government's money war fund, he is thereby necessarily shouldering £100 worth of the real costs of the

war. This, however, is by no means so. A large part of the money paid over by particular individuals to the government represents, not real costs borne by them, but real costs thrown by them on the shoulders of other people. Thus, suppose that a man obtains funds to pay his taxes or subscriptions to war loan by cutting down gifts and charities or by reducing payments to employees whose services are still retained. A person who 'economises' in these ways does not really economise at all, and does not himself hand over any real resources for the service of the government. What he does is to throw the task of meeting the requirements of government upon somebody else. If he reduces an old servant's pension by £50 a year, this old servant has somehow (unless he, in turn, can pass the task forward to someone else) to work harder, to economise, to refrain from new investment, or to use up capital, to the extent of £50 a year. The original 'economiser' has shouldered no part of the State's burden; he has merely transferred the obligation to do this. In like manner, if a man sells securities in his possession to a fellow-citizen and pays taxes and war loan instalments out of the proceeds, what he has done has been to part with a property right in order to induce somebody else to undertake the task of working harder, or economising in consumption, or refraining from investment in new real capital, or using up real capital by selling it to foreigners or otherwise. He himself has done none of these things. He has acted as an intermediary, not as a principal, in

undertaking the real costs that his money payments represent. The same thing is true if he obtains the money he hands over to the government by borrowing either from private persons or from banks resident in his country. Finally, the same thing is true, up to a point, when people provide funds for taxes and war loan subscriptions by reducing their consumption of articles — tobacco, wine, tea or sugar — a part of the price of which is made up of customs or excise duties. Suppose, for example, that a man meets an income-tax claim for £60 by cutting his expenditure on these things by that amount, and that this involves a reduction of, say, £20 in his payment of indirect taxes. In these circumstances he has cut down his total tax payment from £60 to £40, and, therefore, if the aggregate revenue required by government is decided upon, has made it necessary for other taxation to be imposed on other people (and himself) sufficient to fill this gap. Abstinence from dutiable articles therefore constitutes, so far as the duties included in their price are concerned, not a provision, but a shifting, of so much of the real costs of war.

5. Thirdly, consider the relation between real war expenditure and money expenditure. It is often thought that, since the latter of these 'represents' the former, it may be used unconditionally to measure it. This opinion ignores the fact that the aggregate money price expended on real resources may be altered, not only by a change in the quantity of real resources bought, but also, alternatively, by

a change in the price that is paid for each unit of them. On this error large structures of fallacious reasoning have been built up.

Thus, it is widely believed that the real expenditure to a people of waging war is greater or less according as the rate of pay to its soldiers is high or low, and according as a large or small amount of money has to be paid in respect of their dependents. In 1914 many people argued that Germany could conduct the war more cheaply than we could because her soldiers, being conscripts, received a much lower rate of pay than ours did. Again it was, and still is, believed by many people that, because married men have dependents, to whom separation allowances must be made when the men go into the army, whereas, in general, single men have not such dependents, a married soldier involves much more real expenditure to the nation than a single soldier. But the real expenditure involved in the maintenance of the army consists in the services which the men who become soldiers would have rendered had there been no war; and these are obviously the same whether the men are married or single. Hence the rate of pay given to them does not *directly* affect the real expenditure of the nation in any degree. If more is paid to them than they would normally earn, a certain transference of resources is made from the rest of the community to them; if less is paid to them than they would normally earn, a certain transference is made from them to the rest of the community. The aggregate real expenditure on the war of them and the rest of the community com-

bined, that is to say, of the country as a whole, is the same in either event.

A second form of the same fallacy often appears in arguments about government extravagance. In many of these arguments all forms of alleged extravagance are lumped together under the same head, and it is tacitly assumed that the face value of the extravagance always represents the real expenditure that it involves to the nation. For example, the alleged extravagance of continuing to pay £600 a year to Members of Parliament, of paying exorbitant prices to contractors or exorbitant wages to work-people, of taking troops to some place at heavy cost and then taking them back to the place from which they came, of making immense quantities of a certain kind of shell which is afterwards found to be useless — all these things are supposed to be exactly similar in character and effect. This is incorrect. From the money standpoint of the Treasury, it is, of course, true that they stand upon the same footing. They all deplete the government balances and make necessary the raising of more money. From the standpoint of the community as a whole, however, they comprise two quite disparate kinds of extravagance, the effects of which are wholly different. To make masses of shells of a kind that we do not want is a real waste of capital and labour: to transport troops from Egypt to the Dardanelles and then to transport them back again, because the ships were not properly packed, is also a real waste. But to pay a man, whether he be a Member of Parliament, or a contractor, or a

workman, much more than his services are worth, that, undesirable though it is, does not *directly* involve any waste of national resources. It is merely a transference of resources to one set of people in the country — payments made to foreigners are different — at the expense of another set. Of course, if the people from whom the money is taken to make the transference would otherwise have put it into war loan, whereas those to whom it is given use it for personal consumption, the country's power to carry on the war is *indirectly* weakened. Of course, too, large money payments by the government for services rendered to them mean large borrowings and, consequently, a large national debt and the fiscal complications associated therewith later on. In view of these things, it would be ridiculous to contend that large money expenditure due to excessive payments made to contractors and work-people do not matter. They matter a great deal. But — and this is the thing with which we are now alone concerned — they do not represent directly any addition to the real expenditure involved in waging war. In the same way, if the government commandeers the services of men or buildings for less than their market worth, or even for nothing at all, this, while lowering the money expenses, does not directly affect at all the real expenses of the war.

6. Lastly, consider the relation between real costs and real expenditure. The services and things (including leisure) that people do without in order to meet the government's money demands on them

are not identical with the services and things that the government buys in order to carry on war. What private people do without consists in pleasant food, the work of domestic servants, new houses, new motor-cars, petrol, convenient travel, new factories, new clothes and so forth. What the government gets consists in the services of soldiering and of manning ships of war, together with immense masses of guns, shells, aeroplanes, tanks, poison gas and explosives. If there had been no war, the great bulk of these things would not have come into being at all. They are, and are bound to be, quite different from the things that would then have come into being. This distinction provides the basis for certain practical inferences that will be developed in the next chapter.

CHAPTER V

THE CHOICE AMONG PERSONAL ECONOMIES

1. As was pointed out in Chapter III, one of the sources out of which the national war fund may be built up is personal economy in consumption by private people. At first sight we might suppose that, when once the public had decided to economise by cutting down its consumption by a given money value, say a million £, it would be a matter of indifference to anybody other than the individual economisers what particular sort of purchases they decided to cut down. The analysis of the last chapter has, however, prepared us to see that this is not so. The productive powers released from private service by different sorts of million £ economies are not all equally well fitted to furnish the sort of things that governments need for war. This important point is well illustrated by a comparison of two extreme examples. First, suppose that the public are accustomed every year to buy a thousand £'s worth of shells and to explode them for amusement in a barren place. If they decide in war time to dispense with this luxury, the productive powers they thereby release from their service are free to make an equivalent mass of shells for the

government; and shells are things that a government in war time greatly wants. Secondly, suppose that the public are accustomed to spend a thousand £ in purchasing exquisite unexportable hand-made lace manufactured by people who are unable to do anything whatever except make this lace. If they decide to dispense with this luxury, they release from their service productive powers, which, *ex hypothesi*, are incapable of contributing anything whatever to the war needs of the State. On the supposition then that the shells and the lace occupy similar positions in the scale of people's wants, both economies will involve about the same sacrifice of private satisfaction, but one will help the war fund greatly, the other not at all. Extending the line of thought that these illustrations suggest, we readily conclude that, other things being equal, different sorts of economy on the part of the public are more or less effective means of helping to win a war, according as the productive powers they set free from private service are more or less well fitted to produce things that the conduct of war requires. The practical implications of this principle may conveniently be set out in two divisions, according as they affect purchases of direct personal services or purchases of commodities.

2. First, it is quite plain that in war time the services of doctors, of men of mechanical knowledge, of chauffeurs and of young able-bodied men fit for military service and not possessing any specialised skill are, relatively to the price commonly paid for them, of great value for war. On the other hand,

the services of lawyers, of highly skilled gardeners, of poets, of men learned in the ancient languages, of musicians, of actors, of young men medically unfit for military service, of midwives, of women with special skill as children's nurses, of ballet dancers and of music-hall artistes, are, relatively to their price, of very little value for war. Therefore, other things being equal, people will make a more effective contribution towards victory by dismissing chauffeurs, young men servants, and women servants without specialised training but physically fit for industrial work than by dismissing other (and probably older) servants, whose value is chiefly due to specialised quality of little utility in war — a highly skilled flower gardener, an artist in cookery, a nursery maid or governess exceptionally skilled in her chosen task but inept at handling material things, a court musician or a court jester.

3. Secondly, consider purchases of commodities. There are certain things that are wanted by government in exceptionally large quantities for the use of its armies — things such as gunpowder, petrol and meat. These are obviously good things in which to economise. Then there are things made out of materials essential to war needs, economy in which sets free these materials. Examples are articles made of leather, wool and steel. Again there are things made by the same kind of machines and work-people as are required for making things essential to war needs. These include the products of engineering works and the plant required for setting up war factories. Yet again, there are

things the acquisition of which involves the use of ship space and train space that are in great demand for military ends. *Pro tanto* these things — imports from overseas, such as oranges and bananas, and articles the raw materials of whose manufacture are largely imported, such as beer — are suitable objects for war economy. Moreover, *all* imports, whether they occupy much ship space or not, are good objects of war economy because, if they are not bought, there is so much more foreign exchange available for the purchase abroad of war goods. More remotely, things the consumption of which involves the use of coal and cotton are good objects, because coal and cotton are in high demand for export, and exports enable us to buy abroad many things useful in war. On the other hand, there are a number of commodities, which are not useful for war purposes and the value of which is not to any substantial extent due to material, plant, labour or transport services useful for such purposes. These things are, in comparison with others of equal cost, unprofitable objects of war economy. Among them should be included ball-dresses and similar costumes made in England, the value of which principally depends on highly specialised work of a kind for which war has very little use. There should be included, too, water, as supplied by a water company to a town. Finally, there should be included the services rendered by museums and art galleries. In these institutions and their collections there is embodied an enormous capital plant quite useless, or nearly useless, for rendering war

service. If, as a result of our economies, they are shut down, their staffs may, indeed, be utilised in war, but the public loses, not only the use of their staffs, but also the use of the capital establishment of the institutions; and that loss is balanced by no corresponding gain to the government's war efficiency.

4. These results lead at once to the ethical problem of private duty. In view of the fact that certain sorts of economy on the part of the public are more effective aids to war than others, what ought the patriotic public to do? It is important that there should be no confusion about the precise issue here. The preceding discussion has made it plain that several sorts of luxury goods are less advantageous objects of economy than the bulk of necessary goods. The issue is not whether, in view of this fact, a rich man may properly continue to buy ball-dresses in war time. He ought not to buy ball-dresses, because, by refraining from doing so, he can cut his aggregate expenditure down lower than he could do otherwise. The issue is: given the amount of the cut to be made in his aggregate expenditure, would he do better to take £100 off ball-dresses or off bread? The hasty answer, of course, is that every one ought to concentrate entirely upon the sorts of economy that are most helpful towards victory. But this answer is not correct. With sufficient knowledge it should, indeed, be possible, on the basis of what has been said, to draw up a kind of order of merit among different sorts of economies from the point of view of their

comparative effectiveness. But this order of merit cannot be used as a direct criterion of private duty. People's duty depends, not only on the comparative usefulness to the State of different sorts of economy, but also on the comparative sacrifice to themselves that different sorts involve. In general, the last shilling that a man chooses to spend on one thing may be presumed to yield him about as much satisfaction as the last he spends on another thing. But on all things the earlier shillings are likely to yield him much more satisfaction than the later shillings. Hence it will, in general, hurt him much more to concentrate his economies upon a few things than to spread them over many. People, therefore, have no duty to select the thing that stands first in our order of merit, to stop completely their purchase of that, and to proceed in the same way down the list till the whole reduction in expenditure that they intend to make is accomplished. Nor have they necessarily a duty even to knock more expenditure off a thing high up in our order of merit than off one lower down. For, if the one high up is something for which their demand is highly inelastic — bread, for example — a tenth £ knocked off that will mean a much bigger sacrifice for them than a tenth £ knocked off something for which their demand is elastic.[1] They have a duty, however, to push their economies in things high on the list

[1] A man's demand for a commodity is said to be elastic or inelastic according as a given (small) percentage change in price causes a relatively large or a relatively small percentage change in the amount that he wishes to buy.

rather further, and in things low on the list rather less far, than their personal preferences by themselves suggest. *To what extent* they ought to do these things could, of course, only be determined on the basis of a full knowledge of all relevant details.

5. Moreover, the issue is complicated by a distinction that must be drawn between the duty of a single individual and the duty of a group. If a single individual, who has to cut down his aggregate expenditure by £1000, on patriotic grounds cuts his consumption of petrol 10 per cent more, and his consumption of music 10 per cent less, than he personally likes to do, the price of petrol will be put a little lower, and the price of music a little higher, — from the short period point of view relevant to the war — than they would have been put otherwise. Consequently, other people will buy a little more petrol and a little less music than they would have done; and his patriotic action will thus be robbed of its full effect. How far the good he tries to do will be cancelled in this way depends on the nature of the demand and supply of the commodities concerned. If the demand is highly inelastic, there will be very little cancelling: if it is highly elastic, there will be a good deal. But, if there is any cancelling at all, for one out of a hundred individuals to cut off his petrol consumption (in preference to his music consumption) in a given degree helps the government less than one-hundredth as much as similar action on the part of the whole hundred would do; whereas, if the

individuals are all similar, it involves exactly one-hundredth as much loss of private satisfaction. It follows that, as with such things as the Sunday closing of shops and limited hours of work, it may be the duty of the community as a whole, acting through its government, to enforce upon all its members a more stringent selection of economies than it would be the duty of any one of them acting alone on his own initiative to make.

6. Three forms of government action are possible: propaganda, the imposition of duties on the purchase of things the private consumption of which it is especially desirable to cut down, and direct restriction of individual purchases. The method of *propaganda* does not call for study here. Its general character is obvious and its detailed application the concern of political technicians. The method of *duties* cuts from each purchaser an amount of consumption, which varies with the amount of his normal purchases coupled with the elasticity of his demand. If the demands of two persons are equally elastic, the cuts from them will be proportioned to their normal purchases. But as between equally rich people, one of whom has an inelastic demand for one thing useful for war, say petrol, and the other an inelastic demand for another thing of similar usefulness for war, say steel, it allows the first man to make a bigger cut in petrol, and the second a bigger cut in steel, instead of forcing, to the common injury, equal cuts or equal rations in each of these things on both of them. This is clearly an advantage. As between two persons of

different wealth purchasing the same thing the method is, however, less satisfactory. In the first place, as is well known, all specific duties upon commodities of wide consumption tend to strike poor people very heavily as compared with rich people, because they do not take account of differences of quality. There is, therefore, a danger that a large use of the method of duties would involve an unfair burdening of poor people. This danger could, no doubt, be obviated by a judicious compensating arrangement of direct taxation. But, in the second place, there is a danger that, even if the aggregate tax burden thrown upon poor people is not made unduly large, poor people will be forced to divert their consumption away from the particular things subjected to duty to an extent that injures them more than it helps the government. The method of *direct restriction* will be examined in detail in a later chapter. When it takes the form of maximum rations, it cuts down the consumption only of those persons who used to consume more than the permitted ration. Thus it can be applied in such a way as to leave the consumption of really poor people untouched.

CHAPTER VI

GOVERNMENT COMMANDEERING

1. In the preceding chapter it has been made clear that, when a government has got hold of a given volume of purchasing power, the mass of things and services useful for war, which it will be able to obtain with it, will be greater, the more the public economises in the purchase of these particular things. It has been indicated that the sort of economy desired can be stimulated by propaganda, the imposition of duties, or some form of direct restriction upon private purchases. It has now to be observed that there is also available another method. Instead of, or in addition to, putting pressure upon private people to divert their consumption from services and things which it wants, the government may, by direct process, assure to itself its own requirements of particular things and services, leaving to other people only such balance as may remain over after those requirements have been satisfied. There are several ways in which this can be done. It will be convenient to consider them, first, as applied to flows of annually produced goods, and, secondly, as applied to stocks of productive instruments and agents.

2. For flows of annually produced goods the most effective device is for the government to make itself the sole dealer, to reserve for its own use what it requires, and, thereafter, to arrange a plan for distributing among the public what is left over. When the commodity is produced at home, the government can possess itself of the whole supply by commandeering, and it is open to it to fix the price that it will pay at what it considers reasonable, subject only to the knowledge that, if it fixes it too low, supplies may dry up. Thus, in the Great War the British Government took over for several years, at an arranged price, the whole of the wool crop of the country and the whole of the wheat crop. It also commandeered all available timber supplies. For imported commodities government is, of course, less free to fix its own purchase price, because it cannot compel foreigners to sell to it. But, by forbidding its citizens to trade in certain foreign goods, it can, none the less, make itself the sole dealer. The British Government did this for imported wool, for jute, leather, numerous metals, and, by the end of the war, for practically all the common articles of food. It kept what it wanted for its own needs, including, of course, the provisioning of the army, and, by means of priority certificates and rationing, arranged for the distribution of the balance. These methods of distribution will be studied in later chapters.

3. In so far as a government wants for war exactly the same classes of goods that civilians normally want in peace, pretty much all that is necessary can be done by dealing in the way I have been describing

with the annual inflowing stream of production. In fact, however, a great part of the war needs of governments differs from the peace needs of civilians. Consequently, what is wanted is, not merely a transfer of certain things from civilians to government, but also a transfer of productive resources from certain employments to certain other employments. There is thus an opening for commandeering productive instruments and agents. Of this there are two degrees. First, the whole of any particular sort of instrument or agent may be commandeered; secondly, only such proportion of it as the government wishes to turn directly to its own service may be commandeered. In 1914 the first sort of commandeering was applied in the United Kingdom immediately on the outbreak of war to the railway system of the country, and, later on, it was applied to the engineering plant of the country, the coal mines and the flour mills. In 1939 the railway system was in the same way immediately taken over. In the earlier part of the Great War, the second less complete form of commandeering was applied to the mercantile marine, a certain number of vessels being requisitioned by the government at 'blue-book rates', while the rest were left to the free use of their owners. Later on, however, practically the whole of the mercantile marine was commandeered. In 1939 this was done in the first week of war.

4. So far attention has been confined to productive *instruments*. Productive agents can be commandeered under Conscription Acts. In the Great War all fit males of military age, other than those

exempted on some urgent ground, were compulsorily enlisted in the army. There was talk at one time of extending this method to persons other than males of military age and for purposes other than military service. In the United Kingdom the strong dislike felt by manual workers for anything that could be called industrial conscription prevented this from being done. But the right to compel men of military age to join the army was used as a lever to divert those who were not so taken into the channels along which government desired labour to flow. Lists were made of 'non-essential' occupations, into which men of military age were not allowed to go without the leave of the Minister of Munitions and, over against these, lists of essential occupations into which they were directly urged to go in the national interest.[1]

5. For home-made commodities or the services of instruments or agents of production resident here, commandeering can accomplish what no system of limitation of private people's purchases can do. It can cut off the rival demand of foreigners. For example, in normal times a large part of the British mercantile marine is engaged in the carrying trade, outside of this country altogether, between certain foreign countries. It would not be possible to rope in the services of these ships for things helpful to the war merely by forbidding British citizens to make use of them for non-war purposes. They might still go on working for foreigners. So, too, might a

[1] Cf. Hammond, *British Labour Conditions and Legislation during the War*, p. 131.

number of British engineering firms and makers of woollen goods. Of course, the government, instead of commandeering or controlling ships or factories, might prevent them by direct order from working for foreigners. But, once this sort of control is introduced, some steps on the way towards commandeering have already been taken.

6. Again, for home products and domestic instruments and agents of production, a policy of commandeering has the advantage of permitting a limit to be set on the prices that producers are allowed to charge. To limit price in sales to government alone without commandeering would inevitably drive sellers away from government: and to limit price to other purchasers as well as to government without commandeering would subject government to great uncertainty as to how much of the things it wanted it could obtain, because, as will be shown presently, for commodities produced under competitive conditions, an effective limitation upon price renders distribution the sport of accident. If, however, price limitation for things in large government demand is impracticable apart from commandeering, this constitutes a strong argument in favour of commandeering. In a minor war, the material and human requirements of which are small, the damage resulting from failure to limit prices is not likely to be grave. But in the Great War, had the government been forced to buy all the services and things it needed in a free market, people in a position to sell to it could have demanded terrifyingly high prices, and so secured, at national expense, fabulous profits.

It is true, as was pointed out in Chapter IV, that this would not have meant directly any addition to the real expenses or real costs of the war: for these consist in services and things, not in the payments made for them. But it would have meant an enormous addition to the money expenses of the war, and this would have involved probably a further expansion of credit and currency, and, certainly, a great increase in the national debt. Both these things are liable to have a very evil aftermath.

7. The dominating advantage of commandeering is, however, different from anything mentioned so far. It enables the transition from peace production to war production to be effected much more speedily than would be possible without it. A policy confined to collecting purchasing power from the public and spending it on things needed for war would not achieve its end quickly. The transition that has to be made from one set of industrial operations to another is very large. If the government relied merely on financial methods, it would offer, out of the purchasing power in its hands, higher prices than ruled before for the things it needed, while the prices of things with which private persons dispensed in order to provide money for their taxes and loan subscriptions would tend, in consequence of the diminished demand, to fall. The resultant increased profitableness of producing the sort of things government wanted and diminished profitableness of producing other things would cause a change-over of productive resources from other things to government things. This is the general process of industrial

transition in response to changes in the flow of effective demand. Such a process is bound to be gradual. People and capital equipment will not be shifted across at once from the depressed to the expanded forms of production. Friction, the general tendency to procrastination, imperfect knowledge of present facts and future prospects, all hold them back. Many manufacturers, for example, of things not wanted for war, thinking, as they are apt to do, that the war will be short, will hesitate to adapt their works and train their work-people to new tasks; they may even keep them to the manufacture of their former products, with the idea of holding these in stock until peace returns. Yet again, work-people who used to make non-government things, on being thrown out of employment through the contraction of demand, will tend to stay where they are, instead of moving to other employments which are booming, in the hope of a rapid return to normal conditions. Finally, when the effective manufacture of government things requires special training in new processes to be given to work-people or special plant to be set up, private enterprise, even if it is tempted to provide these things at all, — which, in view of its knowledge that the war may end before they have yielded their profit, is doubtful — is sure to provide them slowly. In an intense international conflict, however, delay is extremely dangerous. Time is of the essence of victory. The moulding of industry into the shape proper for war needs, therefore, if the conflict is severe enough, to be helped forward by direct government coercion of industry.

CHAPTER VII

TAXES *VERSUS* LOANS FROM THE PUBLIC

1. In normal times the resources needed by government, apart from the payments made in fees for postal or other direct services, are obtained through taxation. In a well-ordered State, for *ordinary* expenses there is no question of any other arrangement except as a purely temporary makeshift. For government to continue, as a regular practice, to finance part of its ordinary charges by borrowing would mean the piling up of an ever-growing debt, interest payments upon which it would eventually prove impossible to provide. It is, therefore, a generally accepted canon of sound finance that ordinary expenditure — the assistance of poor persons, the upkeep of schools, the maintenance of the army on a peace footing, and so forth — must be financed by taxation and taxation alone.

2. When exceptional expenditure has to be undertaken it is common for governments to resort to loans. If the expenditure is remunerative, in the sense that it is expected to yield a money return adequate to pay interest upon it at the normal rate, loans are resorted to exclusively. If, however, the expenditure is not remunerative, while at the same

time it is exceptional and non-recurrent — expenditure, for example, that is incurred in pulling down a slum area — the issue between taxes and loans is less clear. Of this type of expenditure war expenditure is much the most important instance. The question how far such expenditure should be financed out of current taxation and how far out of voluntary loans has been the subject of prolonged debate and was vehemently discussed in many countries during the progress of the Great War.

3. On two points there is, in this country at least, fairly general agreement. First, if and in so far as loans are employed to finance war, new taxation ought to be imposed at the same time at least sufficient to provide the interest incurred under the loans. For otherwise not only is confidence in the financial stability of the State liable to be wrecked, but also the conclusion of the war would be followed by the paradox of increased, rather than, as the public would naturally expect, diminished, taxation; and this would lead to great discontent. Secondly, at all events in a war on a great scale, it is generally agreed that a policy of finance through taxation alone, however excellent it might be in theory, is in practice out of the question, for the simple reason that people would not stand it. Hence, the phrase *taxes versus loans*, with which this chapter is headed, suggests a sharper antithesis than we really have to face. In a great war there must, in all ordinary circumstances, be both some new taxation and some loans. The extent to which resort should be had to one or other of these things cannot be

determined without detailed reference to current economical and psychological conditions. All that can be attempted here is to set out in a general way the relevant considerations.

4. At the outset it is necessary to clear away a common confusion. It is widely believed that, in so far as war is financed out of taxation, the economic burden involved in it is borne at the time, whereas, in so far as it is financed out of loans, the burden is thrown forward on to the future. This is a misconception. No doubt, when a warring government borrows from abroad, its citizens escape the need of making real payments now, in exchange for pledging themselves and their descendants to make them later on. But the main bulk of war loans are necessarily raised at home. As between these domestic loans and taxes there is no such clear-cut contrast as common opinion supposes. In Chapter III, the several sources out of which the real war fund of a country must come were enumerated and distinguished. It was shown that resources obtained by extra work and by economies in personal expenditure come, in the main, out of income and hit the present only, whereas resources obtained by refraining from new investment, by letting equipment run down, by selling property to foreigners and so forth come out of capital and hit the future. When a given sum of money is raised by the government from anybody, and he does not shift the task of shouldering it on to somebody else, the choice that he makes between these various sources is not determined by the form in which the levy is made upon him. It is open to

him to meet the claims of taxation out of capital and those of loans out of income. The size of the contribution he is called upon to make is a much more important factor than the form of it in determining the sources from which he elects to provide it.

5. It does not follow from this, however, that the choice which the government makes between taxes and loans has no effect at all upon the choice the public make between drawing upon income and drawing upon capital. The question, what, if any, effect the government's choice does in fact produce, is an interesting one and deserves to be studied in some detail. Let us begin by supposing that the loan contemplated as an alternative to taxation is not a voluntary, but a forced, one, and that it will take from each individual exactly the same sum as, under the rival plan, would have been taken from him in taxes; and let us suppose further that each lender is given to understand that, of the taxation required to pay interest and sinking fund on the government debt created by the loan, he will have to provide a proportion exactly equal to his proportion of loan-holdings. It is possible to imagine a world in which the levy of a forced loan on these terms would have the same effect as the collection of an equal sum of money by taxation. To tell a man who expects to live for ever, in a country where the rate of interest is always 3 per cent, that he must surrender £1000 now, is approximately the *same* thing as to tell him that he will have to surrender £30 a year from now onwards for ever. Or, to put the point otherwise, to take from him £1000 now in taxation is approxi-

mately the same thing as to borrow from him £1000 on a loan of 3 per cent, at the same time informing him that the £30 interest to be paid on his loan will be collected every year by that amount of taxation levied on himself. I have said that these two things are *approximately*, and not exactly, the same, because the loan plan would leave the £1000 in our citizen's possession and thus available to fall back upon in an emergency, while, on the tax plan, he would be deprived of this stand-by. But, if we carry our supposition further and abolish all economic friction, it will appear that our citizen could not make use of his £1000 for an emergency without sacrificing £30 a year in interest afterwards, and — always apart from economic friction — if he were prepared to do this, he could, on the rival plan, borrow £1000 for the emergency. On these suppositions the two plans would work in *exactly* the same way, and no one who understood what was being done would act otherwise if confronted with the one than he would do if confronted with the other.

6. Let us now return by degrees to the actual world: and, first, let us reintroduce economic friction. What this means from the present point of view is that, when a person has collateral to offer, even though he is subject to extra taxes equivalent to the interest on the securities which this represents, it is practically very much easier for him to borrow from bankers, not merely in an emergency, but on any occasion, than it would be otherwise. He is, therefore, likely to consider himself *slightly* more hurt by a tax than by an equivalent

loan: and he may, in consequence, make slightly greater efforts to meet the impost by harder work and by economy of consumption. In view, however, of the fact that most people rich enough to be subject to large levies have already ample securities, which, at need, they can pledge or sell, this effect is probably too small to need serious attention.

7. A more important consideration is as follows. In practice, when a man is forced to lend £1000 at 3 per cent, it is not possible to decree that the £30 required annually to pay him his interest shall be taken in taxes from himself. The tax system may be designed to effect this object, and may succeed in effecting it at first. But taxation cannot be worked by way of poll taxes; it must be based on some objects — income, expenditure, commodities or what not. Hence, whenever any given amount of future taxation has to be provided for, the portion of it that will fall on any particular individual cannot be determined beforehand. It will depend roughly on the ratio at the time between his income and the aggregate income of the community, and this ratio is liable to be modified, not only by what he does, but also by what other people do. The tax method of raising money, therefore, means to any citizen the loss in after years of the interest that he would have received on the money he is forced to give to the government: the (forced) loan method means the loss in after years of an amount of taxation, which may exceed or fall short of this sum, according as his income comes to constitute a larger or a smaller proportion of the aggregate

national income. This necessary looseness of connection between the loan burden and the future taxation that a lender will have to meet towards providing his own interest leads to too little attention being paid to the debit side of the account under the loan method. People in general may, therefore, be expected to think themselves *considerably* less hard hit under the loan plan than under the tax plan. Consequently, they will be appreciably less keen to meet the call upon them by economies in consumption and increased output of work. So far as this happens, the capital of the community will be depleted appreciably more under the loan plan than under the tax plan, and the real income of the country accruing in future years will suffer in proportion.

8. Hitherto we have supposed the loan plan to be carried out by way of a forced loan taking from each citizen exactly the sum that would have been taken from him under the tax plan. In actual practice, however, loans are generally voluntary, and large subscribers have good reason to hope that the interest on their holdings will exceed the contribution in taxes which they will have to make to provide this interest; for experience has never yet revealed a tax system graded against large incomes anything like as steeply as loan subscriptions are likely to be graded, at all events when the loan required is large. Hence, the richer classes, from whom, when a large amount of money is wanted, contributions under any plan must chiefly come, will think, and rightly think, that a loan hits them much less hardly than equivalent taxation would do. They are, therefore,

less likely to be induced to check consumption or to work more strenuously, and more likely to subscribe to government only such resources as they would otherwise have invested in industry. Consequently, the check to the provision of work and capital by them will be more serious; and, though there must, of course, be some offset as regards poorer people, in practice this is almost certain to be outweighed. It appears, therefore, that the popular instinct is in some measure justified. Finance by loans does hit capital and, through this, the economic fortunes of future generations *somewhat* more hardly than finance by taxes.

9. Moreover, it is not only through the immediate impact upon capital that loans made now press upon succeeding years. Finance by taxation means a single levy and, thereafter, nothing. Finance by loans (whether voluntary or compulsory) carries with it, unless the strong remedy of a capital levy is applied, a prolonged aftermath of taxes to pay interest and sinking fund on the loans. It is true that these taxes, being paid over to domestic holders of war loan, will represent merely transfers of purchasing power within the country, and not any using up of real resources. But, though they will not directly absorb real income, they may, none the less, indirectly lessen the volume of real income that comes into being. For, being long-enduring and foreseen, the expectation of them is likely, in some measure, to check industry and saving so long as they last. The raising and spending of large loans in war time may, therefore, when indirect as

well as direct effects are taken into account, hit the future with *considerable* severity. This is an important result. It does not, however, constitute a decisive argument against finance by loans. It would only do that if all hitting of the future were necessarily bad: and many people hold that, since wars are waged, partly at least, for the benefit of the future, the future *ought* to bear a substantial share of the burden they involve.

10. A second relevant consideration in the choice between taxes and loans is their comparative effect in leading to an expansion of bank credits, and so to a general rise of prices. In Chapter IX the policy of credit creations on behalf of government as a means of war finance will be examined, and it will be shown that, if pressed far, this policy must lead to many undesirable consequences. Exactly the same consequences will follow if, instead of the credits being created directly for government, they are created for private persons who use them as a means of making the payments to government that are due from them. Now, both under the tax system and under a loan system it is possible for people to resort to credit creation to some extent. There is reason to believe, however, that, if a given sum of money has to be contributed to the government, the contributor is likely to resort more largely to credit creation for a loan payment than for a tax payment. The reason is partly that, as already indicated, under the loan method he does not feel himself to be so hardly hit, and is, therefore, less keenly impelled towards harder work and greater personal

economies, and partly that loan scrip is excellent collateral, on which banks will be ready to lend him money. This consideration tends *pro tanto* against the policy of finance by loans.

11. A third relevant consideration is the comparative effect of finance by taxation and finance by loans upon distribution. As between people of equal wealth in different situations, there is a strong practical argument in favour of voluntary loans as against taxes. Under voluntary loans those persons tend to subscribe who can do so with least difficulty. Of two men, for example, of equal wealth, one of whom is half-way through the building of a factory when a loan is raised, while the other has no special call on his income, the second will naturally take up a much larger share of the loan. Under the tax method both these men would be forced to make the same contribution, and, though the factory builder would probably be able to arrange things somehow by borrowing himself, yet, unless he happened to have a considerable amount of suitable collateral, he might find it very difficult, expensive and inconvenient to do this. Under the loan method those who have free money contribute it naturally and simply; under the tax method it may have to be got from them through an elaborate roundabout process of loans made by them to people subject to the levy but lacking free money of their own. When money is suddenly needed to finance a war, the relatively small disturbance and agitation, which voluntary loans are likely, for this reason, to cause, is a clear point in their favour.

12. After all, however, the main problem of distribution in a State levy is not to organise it conveniently as between people of equal wealth who happen to be differently situated at the moment, but to organise it fairly as between people of different grades of wealth. The fundamental point is this. The amount of resources which it is possible for a government by any plan to draw in a short time from the poor is strictly limited. The available margin among them is, both for individuals and for the poor as a group, small. Consequently, when a large sum has to be raised in, say, a single year, it is *necessary* that by far the greater part of it shall be raised somehow from better-to-do people. Furthermore, it is plain that, generally speaking, as we pass up the scale of wealth, every increase in an individual's income means, not merely an increase in the available margin of resources, but an increase which grows more than in proportion to the growth of income. If one man is twice as rich as another, other things being equal, his available margin is not twice as large, but more than twice as large. Hence, of the money needed by the State the rich man *must* provide, in one way or another, more than the poor man, and the very rich man more than the moderately rich man ; and the amount provided *must* increase, not merely proportionately, but progressively as wealth increases. Now, if the practical choice was between the provision of money in these proportions by taxes and by loans — the distinction between compulsory and voluntary loans is here irrelevant — *the revenue to pay interest on which*

would afterwards be assessed on the different classes in these same proportions, there would be no difference between the distributional effects of the two plans. But, if the above italicised condition is not appended to the loan plan, there is a very important difference. In fact, as has already been indicated on page 78, that condition cannot in practice be satisfied. Taxes afterwards are likely to be assessed on poor people in substantially larger proportion than their contribution to war loans. Hence, whereas the tax method throws on rich people at the time a larger share of the war burden than they are accustomed to bear of ordinary national charges and does nothing else, the loan method, while operating similarly at the time, arranges, in effect, that these rich people or their successors shall afterwards be partially compensated for their large immediate burden by moneys extracted in their interest from poor people. Looking at the matter broadly and taking a fairly long view, we may say that under the tax method rich people will bear a *much* higher proportion of the war charges than they do of normal peace charges; under the loan method they will bear a *somewhat* larger proportion.

13. The bearing of this conclusion on the practical comparison between finance by taxation and finance by loans depends on our opinion about what is the right relative distribution of war burdens and normal peace burdens. Two considerations are relevant here. First, when, as in normal times, what is wanted is a regular annual revenue, it is natural to base taxation in a general way upon income. But,

when a single and entirely abnormal expenditure has to be met, ability to pay is best reflected, not in the income that happens to accrue in that particular year, but rather in income-getting power, or capital — this term being taken to include objects of wealth not used in trade, such as houses and pictures, and also the capitalised value of a man's mental and manual powers.[1] Since £100 of ' earned income ', being terminable with life, represents much less ' capital ' than £100 of income derived from the funds, and since funded and other property is held predominantly by the rich, this consideration suggests that war charges ought to be thrown upon the rich in a greater proportion than the principles appropriate to peace taxation would warrant. Secondly, there is a general feeling that, in a preeminent national emergency, the call from each should be for his *utmost* rather than for his *share*. Men are required to give of their physical strength, not in equal proportions, but from each his all. There is no question of proportionate sacrifice be-

[1] It is not, of course, suggested that the costs of a war can be paid for *out of* capital, in the sense that a person's holdings of land or factories or railways (except so far as they are saleable abroad in return for ' income ') can actually be used for war purposes. The *source* of the funds raised must be the real income of the country. None the less, it would be possible for the government to collect a large part of what is required for war from persons who have no income at all, but only property. If £1000 were taken from such a person, he would have, in effect, to buy with £1000 worth of property £1000 worth of real income from somebody else and to hand this over to the Government. He would be the *subject* of the tax, though his property would not be the *source* of it. (Cf. *ante*, Ch. III.)

tween men of fuller and emptier lives. Indeed, the strong are taken and the weak rejected. It is difficult to see what ground of equity there can be for any different distribution in the summons to financial strength. But this is certainly not the distribution aimed at in the ordinary tax system; and, therefore, some departure from the principles that underlie that system seems to be called for.

14. It is plain that the general trend of the various considerations set out so far points towards the financing of war by taxation rather than by (domestic) loans. There remains, however, a final consideration of a different colour, which must give us pause. If all wars were very short, and the funds needed for them could be raised at one single blow, what has been said above would be applicable without qualification. But, in fact, wars may last for a number of years. When this happens, or there is fear of this happening, the tax plan acts, not merely through the fact of it at the moment, but also through the expectation of its continuance during the war. Just in so far, therefore, as it is thought by the people subjected to it to hit them more severely than loan methods would do, the knowledge that a large part of the fruit of any exertions they make will be absorbed by the State may, in spite of the patriotic stimulus that wars provide, seriously lessen their current exertions. Had that part of the expenses of the Great War which was defrayed out of domestic loans — even apart from creations of bank credits — been defrayed instead out of taxation, not only would the standard rate of income-tax have had to be enormously higher

than the 6s. level which it actually attained, but a great mass of other taxation on the top of income-tax and excess profits duty must also have been imposed. Such a state of things continuing for a number of years might have led to a serious depletion of that real income of services and goods from which alone the real war fund can be drawn. This, to a statesman caring above all things to ensure victory, or, at the worst, avert defeat, is a consideration of supreme importance. It explains and, in the opinion of some persons not unqualified to judge, excuses what many economists deemed the undue hesitation even of the British Government in the use of taxation to finance the Great War.

CHAPTER VIII

THE TECHNIQUE OF VOLUNTARY LOANS

1. In the Great War it was very important for the British Government to make its voluntary loans as productive as possible: for, failing an abundant response, it would have needed either to cut down its military expenditure, thus endangering the war position, or to have fallen back on the risky experiment of compulsion, or to have relied more largely on credit creations, with their injurious reactions upon prices and distribution. Consequently, resort was had to a number of measures designed to swell the flow of loan money to the Treasury. The same problem has to be faced again to-day. Some of the measures available for dealing with it are negative, others positive.

2. Negative methods of stimulating the flow of war loan consist in cutting off from private people alternative methods of employing their money incomes. Apart from piling up idle bank balances, which, in war time is not likely to be carried far, the available alternative methods are (1) buying new output of capital goods, such as plant or machinery or raw material; (2) buying new output of consumable goods and services, such as food or travel; (3) hand-

ing over money and the right to dispose of it to other people in exchange for existing properties or for promises of future interest payments. Since the persons to whom money is handed over in this last way can in turn, if they do not put it into war loan, only buy with it either new output of capital goods or new output of consumable goods, these two sorts of purchase are ultimately the only alternative employments for money besides war loan. *Direct* negative methods of stimulating the flow of war loan consist, therefore, in blocking up, in greater or less degree, these channels.

3. At first sight it is natural to suppose that, if people are compelled to reduce their expenditure on any single sort of article, the fund available for war loan subscriptions is necessarily increased *to some* extent. This, however, is not so. Though it must follow that more of the particular article, on which expenditure is retrenched, will be set free for government, it need not follow that a larger aggregate sum of money will be set free. If the purpose which a prohibited or restricted article serves is very urgent, and if it can also be served more or less by some other article the purchase of which is not obstructed, prohibition or restriction will press purchasing power towards this rival article. If people do not much care about satisfying the purpose, and if the rival article is more expensive and inconvenient, no great volume of productive resources will be directed to it, and the resources secured by withdrawal from the prohibited or restricted article will be almost entirely a net saving. But, if people care a great

deal about the purpose which the State is obstructing they may insist on satisfying it somehow at whatever trouble and cost; and it may then happen that the roundabout method, to which they are compelled to resort, actually absorbs more productive power and costs more money than used to be needed before. A good illustration is afforded by the imposition of duties upon certain classes of imports unaccompanied by excise duties on analogous products (*e.g.* rival types of motor-car) made at home. Instead of causing people to employ less capital and labour, represented by less money, for the need they used to satisfy by importation, the imposition of these duties *may* cause them to satisfy their need through increased manufacture of analogous home products at a greater aggregate cost in capital and labour, represented by a greater sum of money, than used to be required to make exportable goods with which to buy the imports. It is not true, of course, that the prohibition or restriction of selected articles is *bound to* fail in checking the aggregate volume of resources, and their representative money, that is devoted to private service. But it is true that it is much more likely to fail than people and governments generally understand, and that, if it is to succeed, great care must be exercised in the choice and grouping of the things selected for State discouragement.

4. This, however, is not all. There is a large number of different types both of capital goods and of consumption goods. If, therefore, the routes leading to only a few of these are blocked up, however skilfully these few are selected, only a small part of

the money which the blocking extrudes from them is likely to become available for war loan: the main part will be scattered among other employments that are not restricted. From this it follows that, in ordinary peace conditions, there is little use in restricting other openings as a means of stimulating the flow of resources to a particular opening; for in these conditions it would be feasible to restrict only a very few openings. In war, however, restriction can be applied so widely that a single non-restricted opening, namely war loan, may expect to reap a great part of the fruits of it. Thus, in the Great War private expenditure on capital goods was blocked up by a strict limitation, through priority certificates, of the purchase by private persons of a number of important structural materials: and private expenditure on consumable goods was similarly blocked by rules about rationing and by restrictions, made necessary by the shortage of tonnage, on the importation of many luxury and semi-luxury articles.

5. So far attention has been confined to *direct* negative methods of stimulating the flow of war loan. There are also available *indirect* negative methods. As was indicated on page 88, it is open to a man with money, not merely to use it himself, but also, alternatively, to hand it over to somebody else to use. In modern communities a substantial part of their annual money income is handed over by the recipients, either immediately or at one or more removes, to persons intending to buy new output of capital goods, with which to develop industrial concerns at home, or to persons desiring (in effect)

to buy export goods for financing investment abroad. If the handing over of income to these persons is obstructed, the original holders of the income, though they may be led to spend some of what they would have handed over in extra personal consumption and some in buying capital goods for their own private businesses, — such of them as have private businesses — yet they are unlikely to find a ready use for much of it in these ways, and may be expected to turn a good deal of it into war loan. In the Great War the British Government took advantage of this fact. Investment of capital abroad was cut off altogether by Treasury Order, and investment in the outlying portions of the Empire was severely restricted. People were also forbidden to raise capital for investment in the United Kingdom without a licence from the Treasury, and that licence was only granted if the investment was such that a good case could be made out for permitting it.

6. In so far as negative measures for stimulating war loan contributions are successful, the need for positive measures is *pro tanto* small. In practice, however, negative measures can never by themselves accomplish the whole of what is desired. There is room, therefore, for a supplement of positive measures designed to make war loans attractive. Among minor means to this end is the careful adapting of the method and form of loan issues so as to appeal to a wide range of tastes. Thus in the Great War there were offered War Saving Certificates, to be repaid in a lump sum with accumulated interest after an interval of several years, long-dated

War Loans, short-dated Exchequer Bonds and six- or twelve-month Treasury Bills for the money market. Spectacular loans to be subscribed for between definite dates alternated with 'continuous borrowing' by means of Exchequer Bonds always 'on tap'. Great efforts, in short, were made to render the government's securities suitable for all classes of investors. To these devices were added appeals to patriotism. These took the form of propagandist advertisement through newspapers, public meetings, tank weeks, as they used to be called, in which contributions were received in a perambulating armoured tank, the stimulation of competitive endeavours among towns to break one another's record of subscriptions, and so on. Such appeals to patriotism may, however, easily prove less productive than they seem. It is difficult to tell, for example, how far tank weeks really *yield* money and how far they merely cause money to be subscribed in a particular way or at a particular moment which would in any case have come into the Treasury somehow.

7. The reader will have noticed that nothing has so far been said about what is *prima facie* the most obvious measure for attracting subscriptions to war loan, namely, high rates of interest. To this measure there are serious objections. The first is political. One country dares not offer loans at a much higher rate than its opponents in war; for, if it did, public opinion in neutral countries might suspect its financial strength, and neutral governments might be more likely to take sides against it. For this

reason belligerents in difficulties are likely to camouflage the real terms on which loans are offered, so that only persons concerned with business will understand them. Thus advantages may be given, not in the nominal rate of interest, but in issues below par value, in premiums on repayment or in special privileges as regards taxation.

The second objection is economic. When the other methods, particularly the negative methods, for directing resources into war loans have been fully developed, the extra contributions for which high, as against low, rates of interest are responsible, are not likely to be large. No doubt, if a loan is offered at low interest, and people expect that presently a second loan at substantially higher interest will be put on the market, they may hold back, meanwhile storing up surplus income in unused balances. But if, as, of course, it should, the government makes it plain that the failure of an issue at low interest will be followed, not by another issue at higher interest, but by a forced loan at interest still lower, that danger will be obviated. At the same time, the budgetary problem stored up for future Chancellors will be less serious, the lower is the rate of interest at which war loans of a given volume have been issued.

The third objection is ethical. To allow some men to lend their money at high interest while others are giving their lives is repulsive to our sense of fairness. Moreover, that rich men should be allowed to 'make a good thing out of war' may well cause a degree of friction and discontent that hampers

appreciably the efficiency of the country's war effort. These objections are, I think, decisive. Among the negative and positive measures for stimulating contributions to war loans, the offer of high rates of interest ought not to be included.

CHAPTER IX

FINANCE BY NEW MONEY AND BANK CREDITS

1. We have now to consider the remaining important method of war finance, namely, by the creation of new money and of bank credits. This method was largely resorted to during the Great War in all the principal belligerent countries, including the United Kingdom. I propose in the present chapter to describe and discuss our national variant of this common method. In that way it will be easy to exhibit the general principles that are involved.

2. During the Great War, and particularly during the earlier stages of it, the British Government, whether rightly or wrongly, were unwilling to push overt taxation beyond moderate limits, for fear of checking production and rousing powerful resentment. They were equally unwilling to compel people to subscribe to public loans. In these circumstances the amount of money obtained by overt taxes and public loans fell in most weeks considerably below the exigent demands of the army, navy, air force and munitions establishments. Given these conditions and given the determination to cut our cloth according to our coat and not *vice versa*, the

only course open to a government is to finance itself either by printing notes with which to buy what it needs, or by securing the creation in its favour of bank credits, or by some combination of these two devices.

3. To understand these methods let us begin by supposing that there are no such things as cheques or bank deposits and that money consists exclusively of £1 treasury notes. Suppose that war has got into its stride, so that unemployment has practically disappeared, and that, in these conditions the number of Treasury notes is 2000 millions, with an average speed of circulation such that the country's money income is 400 millions per month. By taxes and public loans the government is collecting 150 millions a month from the public for war purposes, thus securing the use of some three-eighths of the country's productive power. A month comes when it needs more than this. Thereupon it issues and spends 100 million new notes. Thus roughly in this month the total money income is 500 millions, of which the government controls 250 millions, instead of, as heretofore, 400 millions, of which it controls 150 millions. That is to say, instead of having command over three-eighths of the country's productive power, it has command over one-half. When the new money has settled down to circulate at the same speed as the old, total money income per month, if the government does nothing more and the rate of monetary circulation is not altered, should be 420 millions a month (*i.e.* one-fifth of 2100 millions instead of one-fifth

of 2000 millions). If the government continues to pay out 100 million new notes monthly, since money income on account of earlier issues will be rising, each successive issue will yield command over a smaller and smaller proportion of the country's productive power. Hence, to secure command continuously over any given proportion, the monthly issues of notes will have continually to increase. But, in spite of this, *so long as people do not come to distrust the currency*, there is no reason why this method of war finance should not achieve its purpose.

4. In a country with a highly developed banking system direct recourse to the printing press to provide notes for government spending is not likely to be had. In this country during the Great War, so far as the government's needs were not satisfied by taxes and public loans, the procedure followed was broadly this. As a first step Ways and Means advances were secured from the Bank of England. The succeeding steps are described in the *First Interim Report of the Committee on Currency and Foreign Exchanges*, 1918, in the following terms: "Suppose, for example, that in a given week the Government require £10,000,000 over and above the receipts from taxation and loans from the public. They apply for an advance from the Bank of England, which, by a book entry, places the amount required to the credit of Public Deposits, in the same way that any other banker credits the account of a customer when he grants him temporary accommodation. The amount is then paid out to

contractors and other Government creditors, and passes, when the cheques are cleared, to the credit of their bankers in the books of the Bank of England; in other words, is transferred from Public to 'Other' deposits; the effect of the whole transaction thus being to increase by £10,000,000 the purchasing power in the hands of the public in the form of deposits in the joint stock banks, and the bankers' cash at the Bank of England by the same amount. The bankers' liabilities to depositors having thus increased by £10,000,000, and their cash reserves by an equal amount, their proportion of cash to liabilities (which was normally before the war something under 20 per cent) is improved."[1] In recent years the bankers' proportion of cash to liabilities has been nearer 11 per cent than 20 per cent. Suppose, however, for the purpose of illustrating our analysis, that it is what the Currency Committee suggested. The banks are in a position to do any one of three things without making the proportion between their reserves and their liabilities any smaller than 20 per cent. Having got 10 millions more reserve and also 10 millions more deposits, they may either (1) credit their customers with a further 40 millions of deposits, which these customers, we may suppose, devote to taking up Treasury bills or war loan; or (2) themselves take up out of their balances with the Bank of England 8 millions of Treasury bills or war loan; or (3) lend the spare 8 millions of their balances to the Bank of

[1] *First Interim Report of the Committee on Currency and Foreign Exchanges*, p. 2 (1918).

England, to be lent by it in turn to the government.

If the first of these methods is adopted the immediate result is as follows. The 40 millions extra deposits are transferred to the government's account at the Bank of England. But, the government spending them, they immediately reappear in bankers' deposit liabilities to private customers. The final position then is as follows: bankers' balances at the Bank of England are 10 millions more than they were before the original 10 millions of credit were created, and bankers' deposit liabilities to private customers 50 millions more, while the government owes 10 millions directly to the Bank of England and 40 millions indirectly to the banks through their customers. Since the bankers' liabilities are standing in their normal proportion to cash in hand and at the Bank of England, there is no inducement to further change.

If the second method is adopted, the immediate result is that the banks have 2 millions more balances at the Bank of England than they had originally; 10 millions more deposits and 8 millions more Treasury bills or war loan. The government, however, forthwith spends the 8 millions of balances that have been transferred to it, and these, therefore, appear again as an 8 millions addition both to bankers' balances at the Bank of England and to bankers' deposit liabilities to customers. We thus have a second stage, with bankers' balances at the Bank of England again 10 millions up and bankers' deposits now 18 millions up. The bankers have

thus still a too favourable proportion; they only need one-fifth of 18 millions out of their 10 millions Bank of England balances, and are, therefore, in a position to take up a further $6\frac{2}{5}$ millions Treasury bills or war loans. When the government spends the balances with which the banks do this, we have a third step: bankers' balances at the Bank of England 10 millions up; bankers' deposit liabilities $24\frac{2}{5}$ millions up. It is obvious that this process will continue until eventually the bankers have taken up 40 millions of Treasury bills or war loan, and are left with deposits of 50 millions against balances at the Bank of England of 10 millions. Thus this method leads in the end to the same result as the other method, save only that the government debt of 40 millions on Treasury bills or war loan is a direct debt to the banks instead of an indirect debt to them mediated by their customers.

On the third method distinguished above the banks lend their 8 millions of spare balances to the Bank of England to be lent by it to the government. On this plan the 8 millions come back, when the government spends them, both into bankers' balances at the Bank of England and into bankers' deposits; and the same process as on the second method is carried through, with the final result that bankers' balances are 10 millions up and bankers' deposits 50 millions up. The government's debt of 40 millions (in addition to its original 10 millions debt to the Bank of England) is still a debt to the bankers, but this time mediated, not through their customers, but through the Bank of England. Thus, all three

methods come in the end to exactly the same thing.[1] There is an original creation of 10 millions credit from the Bank of England to the government, and a subsequent creation of 40 millions from the other banks, which, in one or another way, is made available to the government, the two creations together involving an addition of 50 millions to the deposit liabilities of banks other than the Bank of England, based on an addition of 10 millions to their holdings of " cash in hand and at the Bank of England ".

This procedure cannot, it should be noted, stand by itself. For the creation of bank credits for government use entails an increase in money income and expenditure, and this in turn entails a greater need for currency on the part of the public. Thus the Committee on Currency and Foreign Exchanges wrote, " The greatly increased volume of Bank deposits representing a corresponding increase of purchasing power and therefore leading, in conjunction with other causes, to a great rise of prices, brought about a corresponding demand for legal tender and currency,

[1] It has been suggested that, at one period during the Great War some of the banks counted the debt due to them from the Bank of England on account of their loaned balances as " cash in hand and at the Bank of England ", and not as money at call or short notice, and so included it in the reserve on which their 'proportion' is based. Obviously, if the banks did this, they would be in a position to lend a literally infinite amount to the Bank of England for reloan to the government without reducing their proportion below 20 per cent; for each million of balances thus transferred would, after it had been spent by the government, appear as a net addition of a million to deposits and also to reserve. There is no means of knowing how far, if at all, this policy was in fact adopted.

which could not have been satisfied under the stringent provisions of the Act of 1844. Contractors were obliged to draw cheques against their account in order to discharge their wage bill — itself enhanced on account of the rise of prices." [1] Thus creation of bank credits to finance government purchases must be combined with some use of the printing press to sustain the higher income level which it brings about. For this purpose in the United Kingdom currency notes, designed in the early days of the war for the quite different purpose of parrying a possible hoarding drain on the part of the public, were sold by the Treasury to the banks, against balances held by them at the Bank of England, in continually increasing quantities. The effect of this sale of notes against balances *plus* the resale of the notes by bankers to customers against deposits was ultimately, after the government had spent the balances obtained in exchange for the notes, to leave both bankers' balances at the Bank of England and bankers' deposits the same as before. The government obtained new purchasing power equal to the value of the notes sold, but these notes, entering as they did into circulation among the public, did not constitute a basis for further credit creations in the way that notes sold to banks and held by them as reserve did. In substance, therefore, the sale of notes against balances for passage into public circulation, while incidentally adding something to the purchasing power of

[1] *First Interim Report of the Committee on Currency and Foreign Exchanges*, p. 5.

government, was, in the main, a device for preventing the pyramid of credit from being broken up under the pressure of an internal drain. Their issue enabled the banks to meet the cash requirements of their customers consequent on the high expenditure for which the pyramid of credit was responsible. "Given the necessity for the creation of bank credits in favour of the Government for the purpose of financing war expenditure, these issues could not be avoided. If they had not been made, the banks would have been unable to obtain legal tender with which to meet cheques drawn for cash on their customers' accounts. The unlimited issue of currency notes in exchange for credits (belonging to other bankers) at the Bank of England is at once a consequence and an essential condition of the methods which the Government found it necessary to adopt in order to meet their war expenditure."[1]

5. It is a matter of some interest to determine how far, if at all, the very complicated method of obtaining resources for the government that I have been describing has different effects from those that would have been produced by a straightforward issue of currency notes in direct payment for the government's purchases. I am supposing, of course, that the banking system of the country is what it actually is, not what was imagined in § 3. Apologists of British war finance have made a great point of the fact that the printing press was not used in this way and that notes were only issued in response to business demands. At first sight it seems that this

[1] *Ibid.* p. 5.

complacency is justified. For, on the plan actually adopted, the government's credits were obtained in the form of bank balances, and notes were only issued to support these balances : whereas, if government had simply created notes to pay for its purchases, these notes would have formed a basis for *a very much larger creation of bank credit.* This distinction, however, rests upon the assumption that, if the government had issued notes in direct payment of its purchases, all the notes so issued would have remained, as it were, "alive". This assumption is not justified. If the government in any week had created and paid to contractors 10 million one-pound notes, the contractors presumably would have deposited these notes with their bankers, only keeping in their own hands for wage payments the same number as, on the plan actually adopted, they drew out of their account for this purpose. The joint-stock banks in turn would have deposited these notes with the Bank of England, thus creating balances to their credit there equal to the balances that, on the other plan, they would have created by book transfers, and, equally with them, available for the purchase of Treasury bills. So soon, however, as currency notes entered the Bank of England, they were automatically cancelled and died. To make our comparison a fair one, we must suppose that this same rule would have held good under the printing press plan. But, if it had held good, that plan, though it would have involved the *creation* of many more notes than the actual plan, would only have involved the *survival*

of an approximately equal number. The balances of bankers at the Bank of England, instead of being created by simple book transfers, would have been brought into being through the agency of extra notes marked for destruction, which, in their brief span of life, accomplished nothing except to bring those balances into being. The printing press method, combined with the proviso that in the atmosphere of the Bank of England no currency note can live, is thus, contrary to common opinion, identical in its operation and consequences with the more roundabout policy that was in fact pursued by the British Treasury.

6. In turning from the mechanism to the essential character of these methods of war finance we have at the outset to recall that, as was pointed out in Chapter III, in a serious war a great deal of slack is sure to be taken up, so that perhaps 20 per cent more work is being done by people and by equipment than is done on the average of good and bad times in peace. This implies that, unless money income per head, and so, presumably, the rate of money wages per head, is actually to be reduced, money income in the aggregate must be increased by a like percentage. If legal tender money and bank credits were created for the government in quantities merely sufficient to sustain that increase, this would be nothing different from what happens when, in normal conditions, legal tender and bank money gradually expand to match a corresponding expansion in the numbers and equipment of the population of working age. Whatever, therefore, might be proper if

we were in search of rigid definitions, I shall not, when nothing more than this is done, speak of the government financing war through the creation of new money and bank credits.

Suppose, then, that this stage has been reached: It is, thereafter, theoretically possible for the government to obtain such proportion of the country's real resources as it needs for war by taking from the public in taxes and loans an equivalent proportion of its then money income — some 20 per cent higher than its original money income — and using this to buy goods and services for war. It might perhaps be thought at first sight that this would entail a rise in the prices of ordinary consumption goods, because wage earners and others, into whose hands the government's disbursements on war service come, have more money to spend on these things. But this is a fallacy. The public as a whole would not have more to spend on these things because every year the government would be taking from them in taxes and loans the equivalent of what it was paying out for war service. Hence there would be no reason for the prices of ordinary consumption goods to rise.

But now suppose that the government goes further and continually, while the war lasts, ekes out what it gets in taxes and loans by securing the creation of new credits to be expended on its needs. Plainly this process is a mediating, not an ultimate, one. Its effect is to give the government more purchasing power every year, and thus to deplete the real value of the purchasing power left to private

persons. In this way it enables the government to get possession of more things and services, and so constitutes, as against the public, a concealed form of taxation. This taxation, moreover, is not graduated in any degree and not adjusted in any degree to the size of a man's family. It is simply proportionate to income without even an allowance to very poor people of a tax-free minimum of subsistence. This kind of taxation is generally acknowledged to be exceedingly unfair and oppressive to the poor.

7. It may perhaps be thought that, if, as has just been claimed, finance by credit creation is, in effect, taxation, though of a peculiar kind, it should at least be credited with the superiority which that form of finance was shown in Chapter VII to possess over loans as regards immediate depletion of capital and ultimate discouragement of productive energy. It is true that finance by credit creation may well lead to a somewhat smaller drain than finance by loans would do on material capital. But, since it must strike especially hardly upon the poor, it is certain to lead to a much greater drain upon that immaterial capital which is comprised in the strength and efficiency of the people. Little, if any, real advantage, therefore, can be looked for here. Much the same thing is true as regards the ultimate discouragement of productive energy. Finance by loans, as has been shown, indirectly involves such discouragement, because loans imply continuing taxes to provide interest and sinking fund later on : finance by taxation does not. The paradox of credit creation,

at least on the British plan, is that, though, from the point of view of the public, it corresponds to finance by taxation, from the point of view of the government it is, in large part, finance by interest-bearing loans. So far, indeed, as balances for the government at the Bank of England are obtained in direct exchange for new Treasury notes, no interest has to be paid. So far as they are obtained under Ways and Means advances from the Bank of England, interest is paid at a more or less arbitrary rate, which must not exceed 5 per cent. So far as the creation of credits at the Bank of England and their transfer to the balances of other bankers enables these bankers, on the basis of their existing proportion, to increase their loans to government through the purchase of Treasury bills, interest at the current rate for these bills has to be paid. Thus we get three items: balances bought with new notes, on which there is no interest; balances obtained by Ways and Means advances, on which the interest is limited; balances obtained by the sale of Treasury bills — a sale made possible by the creation of a legal tender basis for further bank credits — on which full interest has to be paid. The interest accumulating under the two latter heads accrues to the banking system of the country as a reward for its work in collecting, as it were, a forced levy on the public on behalf of the government. The payment of it necessitates taxation in the future, just as the payment of interest on an ordinary loan does. *Pro tanto*, therefore, in accordance with the argument developed on page 79, it will make against industrial energy after the war is over.

This is not the whole story. The method of finance we have been describing gives the government every year more purchasing power to spend on goods in general than it takes away from the public. Hence, apart from improvements in productivity, the prices of goods in general must continually rise. It is impossible that the price rise can be confined to war goods; because, this time, the disbursements of the government to wage earners and others who wish to buy ordinary consumption goods are greater every year than what it takes away from them in taxes and loans. Hence the prices of ordinary consumption goods, taken as a whole, *must* rise. This has an important secondary effect on distribution, causing a transfer of real income from one set of people (mainly the receivers of fixed incomes) to another set of people. This incidental disturbance is similar to the disturbance brought about by protective duties on agricultural produce, which, besides causing the consumers of imported produce to make a payment to the Treasury, also cause the consumers of home produce to make a payment to private persons — ultimately to the owners of agricultural land — at home. Some part of the shifting of distribution can, no doubt, be corrected by adjustment in the rates of payment made for various services. Thus wage-earners can insist eventually on a rise of money wages more or less conformable to the rise of prices. But everywhere the process of adjustment is bound to involve much friction and some loss of production through industrial disputes; and, for some persons, *e.g.*

debenture holders as against the holders of ordinary shares, no adjustment is possible at all. These considerations clearly show that, on the side of distribution, finance by the creation of bank credits is much inferior, not only to ordinary taxes, but even to ordinary loans.

But there is worse to come. Continuous recourse to the creation of new money and new bank credits to finance a war, after it has been carried a certain distance, is liable to generate, not merely a progressive but a rapidly accelerating, rise of prices. In a free economy not tied either by law or convention to a fixed parity with gold, this movement need not call into play, as it must do under an international gold standard, any automatic check upon itself. Prices go on moving up and the foreign exchanges go on moving against the country in a corresponding or, as may well happen, in a greater degree. Because of the rise in prices higher money wage rates are demanded; this makes prices rise still further; and so on cumulatively. If the use of this method of finance is kept within fairly narrow bounds, the public's confidence in the currency need not be shaken and the price level need not rise more than in proportion to the increase in the stock of money. But, if a government, whether through incompetence or through the sheer pressure of events, carries this method too far, public confidence in the country's currency *will* be shaken. Money will no longer circulate from income to income at normal, but at, progressively increasing, speed. A 'flight from the currency' will be set up, till people

try to rid themselves of it in exchange for some sort of durable good the instant they receive it. The fear that prices will rise makes them rise, and the rise itself generates further fear. The command over real resources that a given creation of new credits provides dwindles rapidly. *Galloping inflation* sets in. A unit of currency in terms of commodities, as well as in terms of foreign money, dwindles towards nothing; and the whole monetary system threatens to collapse, as the mark collapsed in the days of the Ruhr invasion. This kind of catastrophe is not, of course, a *necessary* sequel to the use of new money and bank credits as a means of finance by governments enmeshed in war. Though a great, it is also a very distant danger — one which, in a financially strong country, 'happily foreknowing may avoid'. But it is a possibility which ought not to be left out of account.

8. On the strength of the various considerations that have been set out in the course of this Chapter, it is generally agreed that, though the creation of new money and bank credits may be a convenient means of meeting war requirements at an early stage, before there has been time to organise an adequate scheme of taxation and public loans, yet the method is inherently bad, and a government at war should restrict it within the narrowest possible limits.

CHAPTER X

PRICE CONTROL

1. IN this chapter I am not concerned with price control over monopolists, whether public utility concerns or others, but with control where the factor making for high prices is independent of monopoly. This kind of price control was unknown in modern times until the Great War. During that war it assumed great importance and covered a wide range. The purpose of it was to stop 'profiteering' on the part of certain fortunately situated individuals against the general community — more particularly in respect of things purchased from them by the government and of essential goods that played a large part in the consumption of the poorer classes. Broadly put, the position was as follows. The war caused in two ways a great shortage in certain things. On the one hand, for munition articles, army clothes and so forth, there was an enormous new government need much in excess of normal supplies. On the other hand, for various articles of ordinary civilian use, the contraction of available tonnage for the importation of food and the materials of civilian industry caused supplies to fall much below the normal. The shortage brought about in one or other

of these ways put it in the power of persons who happened to hold stocks of short commodities, or to be able to produce them quickly, to charge for them prices very much higher than usual. When the shortage was due to increased government demand, the scale of business done by these persons being as large as, or larger than, before, the high prices that they were enabled to charge necessarily yielded them abnormally large profits. When it was due to contraction of supply the gain from high prices *might* be cancelled by loss due to lessened sales; so that abnormally large profits were not obtained. For a number of things, however, the conditions of demand are probably such that a shortage of, say, 10 per cent in the supply causes the price offered by purchasers to rise by much more than 10 per cent. For the sellers of articles of this class the shortage, even when it was due to a supply contraction, often meant abnormal profits. Of course, some of these abnormal profits were more apparent than real, for, if prices all round are doubled, a doubling of money profits will only enable a man to get the same amount of things as before. Very often, however, money profits were enhanced very much more than in proportion to the rise in general prices. Wherever this happened, certain specially favoured persons were benefiting greatly as a direct consequence of the war. This state of affairs naturally caused resentment and suggested State interference.

2. It must be clearly understood that the thing war sentiment seeks to eliminate is not merely *high* profits. In America, at one period of the Great War,

a profits tax was imposed based on the excess earnings of corporations above a defined percentage on their capital, whether or not earnings as high as this had been accruing to them before the war also. This kind of thing is not relevant to our present problem. That problem is to prevent fortunately situated persons from absorbing large *war* profits. We have nothing to do with the fact that, even in ordinary times, some individual producers in every industry, whether from superior ability or from luck or from the ownership of a site situated specially near to good markets or railway facilities, obtain a much bigger profit than others. Our objective is, not differences between the earnings of some producers *and of others of the same class in normal times, but* differences between the earnings of the general body of people producing a particular commodity on account of the war and apart from it. It may be said at once that the problem of isolating these differences cannot be completely solved, because, within special profits accruing during a war, it is not possible in a general way—though a rough allowance can be made for the circumstances of new firms—to distinguish between those special profits that are, and those that are not, *due* to the war. With a few reservations it is necessary to assume that they are all due to the war, although we know that the assumption is not in fact correct. This is unfortunate, but it cannot practically be avoided.

3. When the above assumption is made, it may seem at first sight that what public sentiment will seek to prevent or restrict are war-time money profits

exceeding (by more than a 'fair return' on any new capital that may have been invested) pre-war money profits. Unfortunately, however, as has already been indicated, with general prices moving upwards, a given money profit means a diminished real profit. It is proper that allowance should be made for this. A natural suggestion is that that could be done quite simply by multiplying the rate of money profit that used to be earned by the proportionate rise in general prices. So far as profit consists of interest on capital previously invested, this is correct. It is correct, too, so far as profit consists of payment for the services of management and so forth. But for new capital invested during the period when high prices were ruling the change in prices has no relevance. This change has already been reckoned in the face value of the capital. On the other hand, if the general rate of money interest has risen, that change should, of course, be taken into account in formulating our standard of reasonable return. In practice, these complications cannot be allowed for on any exact plan. Plainly, however, they *ought* to be allowed for so far as the information accessible to government permits. So far as they are not allowed for, any method aimed at eliminating or restricting war profits is imperfect.

4. Among these methods the most obvious are the method of excess (war) profits taxation and the method of maximum prices. Under the former method, if it were employed by itself, fortunately situated sellers would be left free to charge such prices as the market would bear, thus collecting

abnormal profits in the first instance; but would afterwards be deprived of the bulk of them, for the benefit of the Exchequer, by a high war profits tax. Under the latter method the prices that sellers are allowed to charge would be limited by authority to rates at which it is estimated that abnormal profits will not accrue to them. The excess (war) profits method, enormously fruitful though it proved during the Great War, is open to grave objection. It deprives producers of the normal motive for striving after economical methods of production and tempts them into all sorts of evasive wastes. Moreover, since an experiment that succeeds is not permitted to yield them a good return, while one that fails must expose them to loss, the spirit of enterprise is checked. There is, however, a more decisive objection to allowing the excess (war) profits method to operate alone. Broadly and generally we may say that the choice between it and the maximum price method makes no difference to fortunately situated sellers. But it makes a great difference to the people who happen to need the particular goods or services that these persons sell. For, whereas under the maximum price plan they are left untouched, under the excess (war) profits plan a special levy is, in effect, placed upon them for the benefit of the general body of taxpayers. Where, indeed, the taxpayers themselves, through the government, are the principal buyers, or where the public are buyers more or less in the proportion in which they are taxpayers, it does not greatly matter which of the two plans is chosen. But, where, as in practically all articles of food, poor

people play a much larger part, compared with rich people, as buyers of an article which is short than they play as taxpayers, it does greatly matter. For, if the State were to adopt the excess profits plan in preference to the maximum price plan, it would be relieving the well-to-do of a large block of taxation, and throwing it, by a roundabout and semi-secret process, upon the shoulders of the poor. Whatever might be thought of the desirability of exacting a larger contribution from relatively poor persons, a device of that kind would never be tolerated. Consequently, in the Great War, over a large part of the field, the excess profits plan could not practically be made the *main* engine for preventing fortunately situated sellers from making fortunes out of the war. Resort had of necessity to be had also to the plan of maximum prices.

5. Some readers may perhaps object *in limine* that the whole idea of price limitation as a means of helping the public against possible exploiters is illusory, because an enforced cheapening of one sort of good will merely lead indirectly to an increase in the prices of other sorts. If, it may be argued, the government forces coal-owners or farmers to charge less for their product than market conditions would allow, people — who, in the conditions of shortage, may be presumed to buy the same quantity of coal or bread whether price is controlled or not — will have more purchasing power left to them with which to buy other things; and other people will be enabled to profiteer. But, even if aggregate income, and so expenditure, are not affected, a given

amount of profiteering is less objectionable if spread in small doses among many people than if concentrated in large doses on a few. Moreover it is not likely that aggregate money income and expenditure will be unaffected. In the Great War freedom to sellers to exact enormous prices for things sold to the government itself forced the government to raise more funds by credit creation than would have been needed otherwise ; and restriction of this freedom led indirectly to a lessening of credit creation. This state of things implies a check to the upward movement of money incomes and so of the average level of prices as a whole. The fixing of maxima for a number of particular prices thus indirectly helps a government to hold back from courses that carry with them the ultimate threat of galloping inflation.

6. Government restriction of particular prices is not then a policy either foredoomed to failure or necessarily futile. We have, therefore, to enquire how it can be worked out. In the attempts made to solve this problem in the United Kingdom during the course of the Great War many difficulties emerged, which it will be well to set out in order. The first of these was the difficulty of definition. The same name often covers a great variety of different qualities of article, which it may be extremely hard to disentangle in any formal schedule. When this condition prevails it is impossible to exercise control over prices by general rules, and it becomes necessary to fall back upon the cumbrous device of individual appraisement. Thus, under

the Raw Cocoa Order of March, 1918, it was laid down that no raw cocoa might be sold except at 'a fair value', this fair value being determined by a person authorised by the Food Controller to determine the grades of the various lots of cocoa. The same plan was adopted at the end of 1917 for controlling the prices of cattle and sheep sold by live weight at market. Clearly this plan could not be employed on a large scale, owing to the vast amount of labour that it involves. Consequently, in general, some modification of it was essential, and some general classification of grades had, in spite of the openings for evasion that this permits, to be, in one way or another, relied upon.

A second difficulty, when the problem of *defining* grades of quality was overcome, resulted from the mere fact that grades were often very numerous. The task of fixing prices directly for a great variety of these might well be more than any authority, at all events in the earlier stages of its operation, was prepared to enter upon. When there were only a few grades, it was comparatively easy, with the help of advice from experts, to do this; but when there were a great many, it was thought better to rely, not on a schedule of maximum prices, but on a general order determining the relations between the prices that might be charged in the future and those that had been charged in the past. An example of this plan was the Order of the Ministry of Munitions, issued in August, 1916, by which sellers of machine tools were forbidden, except with the sanction of the Minister, henceforward to charge

prices higher than they were charging in July, 1915.

An analogous difficulty had to be faced when a commodity, about the grading of which, perhaps, there was no need to trouble, was produced under different conditions in a number of different localities, in such wise that a single maximum price would not treat different producers fairly. Here, too, inability to construct a schedule as varied as the circumstances required forced the controlling authority to fall back on the plan of fixing, not future prices themselves, but the relation between future prices and past prices. Thus, in May, 1917, an Order was issued that no imported soft wood should be sold at prices above those that ruled *in each several locality* in the week ending January 31, 1917. This Order was subsequently modified as regards imports from Scandinavia; but with that we are not concerned.

So far it has been tacitly assumed that the maximum price aimed at for any one commodity of a given grade is a single price. For some commodities, however, no one uniform price ruling throughout the year is adapted to the conditions of their production and sale, and a series of maxima is needed. Plainly, a series is more difficult to determine correctly than a single price. Consequently, here again the controlling authority was driven to the method of regulating the *relation* between future and past prices. Thus, in July, 1917, it was ordered that the wholesale price of milk per imperial gallon should not henceforward anywhere exceed by more

than 6½d. the price charged in the corresponding month a year before, and that the retail price per imperial quart should not exceed this corresponding price by more than 2d. The same plan was followed in the Price of Coal (Limitation) Act of 1915, which decreed that no colliery company should charge a price exceeding by more than 4s. (afterwards raised to 6s. 6d.) the price charged on a similar sale at a similar date in 1913–14.

Plainly, all these indirect and roundabout methods of control left the way open for evasion and were likely to prove difficult to enforce. Consequently, controlling authorities, as they got a better grip and better knowledge of the conditions of various industries, tried to step forward to the more precise method of maximum price schedules. More and more this became the predominant plan. The producers' and wholesalers' prices of most of the more important articles of food came to be fixed directly by schedule, as were also the prices of most of the commodities controlled by the Ministry of Munitions. For most things it was found sufficient to set up a single schedule. But sometimes different producers' prices were fixed for different parts of the country. With bulky and heavy articles, unless this was done, there would be a tendency for the things to stagnate near the places where they were produced. Hence for hay, for example, Scotland was given one price, England another. Sometimes, too, a series of schedules was set up to apply to different parts of the year. Unless this was done, people would be tempted to sell out all the supplies

of things the production of which was seasonal directly after the harvest, instead of distributing sales, and so consumption, fairly evenly over the year. For potatoes the Order of February, 1917, fixed one price up till March 31, and another higher price after that date; and for peas and beans an Order of May, 1917, fixed three prices, diminishing in amount for sales in June, July and later months. Similarly for wheat, oats and barley, to be harvested in the United Kingdom, the Food Controller, in August, 1917, fixed a series of prices rising gradually in each successive two months from November, 1917, to June, 1918. A later Order fixing maximum milk prices made a similar differentiation between different parts of the year. It is plain that the direct establishment of maximum prices is, if the appropriate prices can once be worked out satisfactorily, likely to prove much more effective than any roundabout plan.

So far we have only taken account of industries so simply organised that the producers sell a finished product direct, without any intermediary, to ultimate consumers. But in most industries there are several stages between the original material or service and the finished product in consumers' hands. This fact gives rise to further problems. The conditions of demand for any finished product being given, when a maximum price less than the demand price of the available quantity of any material or service used in making and selling it is fixed, the price of the finished product need not be lowered correspondingly, but it is in the power of

any unregulated seller in a line between the provider of this material or service and the consumer of the finished product to add on to his charges the equivalent of whatever has been knocked off the charges of the regulated sellers. Thus, if the price of coal at the pit-mouth were reduced by State action and nothing else were done, the only effect might be that dealers in coal would buy more cheaply while retaining the old price of sale. Again, if the price of cattle were forced down and nothing else done, retail prices might remain unaltered, while butchers and meat dealers gained enormously. Yet again, if freight-rates on imported materials were kept artificially low by government action, the various people who use these materials in their industries might get the whole benefit. Nor is it merely *possible* that this *might* happen. In general it *would* happen, except in so far as the people on whom a power of exaction was thus conferred deliberately from patriotic motives, or from fear of popular resentment, decided to forgo their advantage.[1] To prevent this, in the Great War the fixing of maximum prices at earlier stages of production had to be coupled with control over the profits which manufacturers or dealers at a later stage might make by adding further charges on to these prices. One way in which this control was exercised was by limiting the *percentage* addition

[1] This consideration may properly be urged by an individual producer if he is asked voluntarily to reduce his charges below market level. He may reply that for him to do this would merely put money into the pockets of dealers intermediate between him and the consuming public.

that might be made by any seller in the line. In May, 1917, for example, it was decreed that no timber from Russia should be sold at an advance of more than 10 per cent on the purchase price; and in September, 1917, a schedule of prices for fish was fixed as between fish-curers and wholesale dealers, and other sellers (with the exception of retailers) were prohibited from adding more than 10 per cent on to the scheduled prices. More usually it was not the *percentage*, but the *amount*, of addition that was limited. Thus, under the Cheese Order of August, 1917, first-hand prices of various sorts of British-made cheese were fixed as from the maker, and it was provided that no dealer other than the maker should add on to them more than the actual charge for transport *plus*, in general, 6s. per cwt. In October it was provided further that retailers should not add on to the prices actually paid by them more than 2½d. per lb. In the same month the prices of the various sorts of leather were regulated on the same general plan. In like manner, the price of horse and poultry mixture was controlled, in November, 1917, by an Order forbidding the maker to charge a price exceeding the cost to him of his ingredients by more than £1 : 10s. per ton; and the amount that other sellers might add on was limited to 1s. per cwt. on sales of 6 cwt. and more, 3s. per cwt. on sales of from 3 to 6 cwt., and so on. In meat a variant on this plan was adopted, in the first instance, on account of difficulties due to the custom among retailers of obtaining different proportions of their profit from the sale of different

joints. In an Order of September, 1917, it was laid down that no person should in any fortnight sell meat by retail at prices that would cause the aggregate price received by him to exceed actual costs to him by more than a prescribed percentage (20 per cent or 2½d. per lb., whichever should be less). In August, 1917, a rule on similar lines was laid down for retailers of bacon and hams.

It is evident that plans of this kind for controlling the charges to be made at the later stages of a commodity's progress to the consumer suffer from the same sort of disadvantage that roundabout attempts to control producers' charges suffer from. They are liable to evasion. Consequently, the controlling authorities sought, as they became more masters of their work, to evolve some more satisfactory arrangement. One stage in this evolution is illustrated by the Butter Prices Order of August, 1917. In that Order it was laid down that retailers should not add to the price of butter sold by them more than 2½d. per lb. above the actual cost of it to them; but it was provided further that local Food Control Committees *might* prescribe a scale of maximum retail prices in accordance with the general directions of the Order (which includes rules about maker's, importer's and wholesaler's prices), although conformity with that scale should not relieve any retailer from the obligation not to add on more than 2½d. per lb. A slightly more advanced stage is illustrated by the plan adopted for regulating the retail prices of coal. The general principle was laid down that retailers should not add on to their own

purchase price more than 1s. per ton over and above the costs of actual handling and dealing with the coal (including office expenses apart from the trader's own salary). But this principle was not left, as it were, in the air. It was provided that local authorities, after consultation and inquiry, should work it out and apply it in the form of a definite list of retail prices applicable to their district. Yet a further stage is reached when the controlling authority itself fixes lists of maximum prices at more than one point on the way from producer to consumer. The Potatoes Order of September, 1917, was of this type. Maximum prices were fixed for growers; wholesale dealers were forbidden to sell in any week at prices that yielded them more than 7s. 6d. a ton beyond their total costs on all purchases of potatoes — costs which varied with the transport conditions of different districts — and an elaborate scale of retail prices was fixed, which related the permitted price per lb. to the price per cwt., including price of transport, that the retailer had actually paid for different classes of potatoes. The final stage is reached when definite schedules are fixed throughout — for producer, wholesaler and retailer equally — by the controlling authority itself. This was the arrangement to which the Ministry of Food steadily progressed. It was definitely attained in regard to British onions, most sorts of fish, beef and mutton, jam and fruit for jam, peas and beans, hay, oats and wheat straw. Lest, through imperfect knowledge, the special circumstances of particular districts should have been neglected in the construc-

tion of these scales, a safeguard was sometimes provided in the form of a rule empowering local Food Committees, with the sanction of the Food Controller, to vary the maxima in their district. This provision was introduced into the Order of January, 1918, fixing maximum prices for rabbits. In like manner, it was provided in an Order of September, 1917, that, where the Food Controller or a local Food Committee was satisfied that, by reason of some exceptional circumstance, flour or bread could not be sold by retail at the official maximum price " so as to yield a reasonable profit ", a licence might be issued, either for the whole or for a part of any Committee's area, permitting higher prices to be charged. The Order of January, 1918, fixing a schedule of maximum prices for most kinds of fish, was made subject, as regards retail prices, to similar local revision, as was also the Milk Prices Order of March, 1918. A like power of varying local retail prices, with the sanction of the Food Controller was accorded to the local Food Committees under the Potato Prices Order of September, 1917.

Hitherto attention has been confined to commodities that come into the consumer's hands in much the same form as that in which they leave the hands of producers. Further complications are introduced when we have to do with raw materials that are worked up into elaborated finished articles. Here, owing to the varying parts which the raw material plays in different types and grades of finished goods, it is not generally possible to fix

schedules of prices beyond the raw material. Consequently, for two important articles, boots and clothes, an ingenious roundabout plan was adopted. An attempt was made to induce, or compel, manufacturers to devote a considerable part of their plant to making ‘ standard articles ’ to be sold at prices calculated on a basis of conversion costs, in the hope that the competition of these articles in the market would indirectly keep down the price that it was profitable to charge for similar articles that were not standardised. In boots manufacturers were ordered to devote one-third of that part of their plant which was engaged on civilian work to making ‘ standard boots ’. In clothes no fixed proportion of plant was forced into making standard suits, but manufacturers were tempted to take up this kind of work by relatively favourable treatment in the matter of the quota of raw wool allowed to them. In cotton goods, though the price of raw cotton was officially controlled, no corresponding control of the finished commodity was attempted, the argument being that cotton manufacturers were sufficiently burdened by having to provide a special levy to pay benefit to work-people thrown out of work by the reduction in the number of spindles and looms that they were allowed to operate.

7. Up to this point we have been concerned with matters of technique. We now come to a more fundamental issue. *Prima facie*, authoritative limitation of the price that may be charged for a thing produced under competitive conditions is likely to check the output of that thing. With a thing pro-

duced by a monopolist, who is charging for it more than the supply price of the quantity he is selling, such price limitation, by preventing him from seeking his gain by high prices, may force him to seek it through large sales, and so may actually stimulate production. But for goods produced under competitive conditions, sellers could not in any event charge more than the supply price of the quantity sold, and, therefore, limitation of price, at the same time that it prevents the occurrence of abnormal profits, will cause output to be smaller than it would be if prices were left free. The reason, of course, is that, when there is a shortage of anything, it is just through the prospect of high prices and high profits that the shortage corrects itself. The prospect of exceptional gains diverts free resources into the industry which is making the things that are short. Cut off this prospect, and the associated increase of supply will be checked. Any practical policy of price control must take account of this fact. There is no question, as has already been explained, of cutting any special profits that well-managed or fortunately-situated firms were making in peace time, or of striking at the differential advantages they enjoy as against other firms. The war profit that it is sought to prevent or reduce is further profit due to the special strategic position enjoyed by certain persons in time of war. Nobody would suggest forcing down prices below the point at which this special war profit is done away. The true issue is how much higher than this they should be allowed to stand. A little war 'profiteering' is less

harmful than a large check to the output of controlled commodities and to a large diversion of energy to making other commodities; a great deal of profiteering is more harmful than a very small check. A government, which has decided to control the prices of a number of important commodities, has to decide further how far it will cut them below the level that free competition would bring about towards the level that would yield the pre-war scale of profit; and, in forming this decision, it has to balance the evils of various amounts of profiteering against those of various degrees of check to the supply of those commodities.

8. The effect of any given cut in prices below the 'natural' level, which unfettered competition would bring about, depends on how elastic is the supply of the controlled article. The supply of imported goods, such as wheat and silver, is extremely elastic to this country, because there are many other markets open to the sellers of them besides the United Kingdom. If the government attempted to fix maximum prices for these things substantially below the ruling world price, the supplies available to this country would be very greatly reduced. Consequently, in the Great War, no attempt was made to limit the prices which foreign importers were allowed to charge for their goods. The government, and any private person who was allowed to buy at all, paid the price which market conditions, or, in some circumstances, the control policy of foreign governments, determined. Home-produced articles with a large export market would

also normally have an elastic supply to purchasers in this country, because it is possible to divert sales from domestic to foreign buyers. For such things, therefore, if free export is permitted, price control is impracticable. It is, however, possible, as was done with British coal, to limit the amount of exportation that is permitted, and so to do away with this source of elasticity. Moreover, in war time, even if no overt rule is made, export may be automatically limited by the dangers of the sea. Yet again, there are many commodities which have not normally a large export market, and for which, therefore, the elasticity of supply of British-made stuff to British consumers is substantially equivalent to the elasticity of British production.

9. For these commodities, as, indeed, for all commodities, it is further important to observe that the elasticity of supply, or production, is not a single fixed thing. It, and the consequent check to output which a given cut in permitted price may be expected to bring about, is different according to the length of time for which the cut is imposed. A *permanent* policy of preventing groups of producers (other than monopolists) from charging prices that yield abnormal profits on occasions when the conditions of the market give them power to do so would certainly react seriously on production. People, in making choice of investments, take account of the ups and downs, and, so far as their judgement is correct, place their resources in such a way that, on the average and on the whole, the rate of yield works out about equally in different occupations. In

these circumstances for the State regularly to cut down prices in any industry below the competitive level at times when, if there were no government interference, that industry might expect to enjoy exceptional profits must, in effect, penalise it as compared with more stable industries. For if, in a hilly district where the average level of peaks and valleys is the same as it is on a plateau, the tops of the peaks are removed, the average level there will be reduced below that of the plateau. Differential action checks the flow of resources that would otherwise seek investment in building up the permanent equipment of the threatened industry. If, for example, the State adopted a general policy of forbidding farmers to charge abnormally high prices when there are bad world harvests, this would check investment in agriculture; because people expect bad world harvests from time to time and look to high prices then to set against low prices in bumper years. With price regulation limited to a single exceptional occasion, the position is quite different. Thus, if there is an exceptional shortage in the catch of fish on a day when fish happen to be in great demand, a limitation of price cannot interfere with the supply already caught, and, if it is understood that the limitation is for once only, it will not interfere with fishing activity afterwards. If the foreign supply of iron ore is cut off for one year, and it is known that the shortage will last for one year only, no practicable price would have called out a large increase in domestic supplies over so short a period, and, therefore, limitation of price will not make

much difference. Yet again, if the short commodity is a thing like houses, of which the annual output is necessarily small relatively to the total stock, to limit price for a short time, even if it affects *production* substantially, cannot affect *supply* much. In the Great War the sort of price limitation aimed at was evidently single, exceptional, and, it was hoped, for a short time only. Consequently, its injurious effect upon production might be expected, even apart from the stimulating effect of patriotic propaganda, to be small.

10. In the Great War the British Government endeavoured to fix their price maxima at levels that would not seriously reduce the production of the several commodities subjected to control below what it would have been in a market not subject to price regulation. This meant allowing charges that yielded very substantial profits to producers — profits which were afterwards in part absorbed by the Treasury under the excess profits tax. The method of allowing a wide margin in the maximum price fixed upon is not, however, the only method by which it is possible to prevent production being substantially checked by price control. An alternative plan is to couple a comparatively low maximum price with the grant of a bounty. Such a bounty may either be given on the whole output or confined to that part of it which is produced with greatest difficulty. For example, a maximum price for wheat, calculated to yield normal profits on some given estimated output, might be established; and at the same time it might be provided that farmers should receive a

bonus on any addition to the wheat crop above their previous output or, to get over the difficulty of harvest variations, on any addition to their acreage under wheat. In like manner, maximum rents might be fixed for all smallish houses, and on new ones built after some arranged date a subsidy might be paid. In industry proper this device would, no doubt, be exceedingly difficult to operate. Still it deserves study. An essential point to keep in mind is that a bounty of the type here contemplated, designed to cancel the restrictive effect on production of governmental limitation of price, is fundamentally different from a bounty unaccompanied by price restriction. That type of bounty causes production of the bounty-fed article to be carried farther than it would be under the working of competitive forces; the cancelling bounty aims at preventing price limitation from causing production to be carried less far. This is a very important distinction. On account of it, while there is a presumption — which may, indeed, in certain circumstances be rebutted — against normal bounties, there is a corresponding presumption *in favour of* cancelling bounties.

11. It will have been noticed that nothing has been said so far about the absolute levels at which price maxima, when they are imposed, should be fixed. Clearly the appropriate levels must depend upon the detailed circumstances affecting different commodities. But it is unreasonable to expect that the general body of prices can be prevented in a long war from rising in some degree above their pre-war level. Food

and raw materials are largely imported from abroad. The prices of these things in dollars may be expected to rise; while at the same time it may well take a larger number of pounds than before to purchase, say, 100 dollars. Insurance rates for overseas cargoes must also inevitably be higher in war than in peace. Yet again, there is a strong tendency in war time, when labour is in exceptionally keen demand, for money wage rates to go up; which will in turn force up the prices of all goods in the manufacture of which labour plays an important part. Thus the utmost that government control can do is to restrict, it cannot hope to prevent upward movement in a number of prices — movements, moreover, which are likely to become more marked the longer war lasts.

12. One further observation is called for. In 1939 the technical background of price regulation is entirely different from what it was in 1914. At that time, for ordinary commodities — as distinguished from such things as gas, railway transport and cab fares — no machinery for public regulation existed. Now this country is possessed of a vast medley of marketing boards, of which those controlling milk, bacon and potatoes are the best known. Thus, *prima facie*, we are in a better position — because these organisations exist — for introducing an effective control of prices than we were a quarter of a century ago. On the other hand, it must be remembered, these organisations were set up with the express purpose of preventing farmers and various middlemen from earning too little, while what is now

required is to prevent them from earning too much. Whether bodies designed for the former purpose with personnel and mentality adjusted to it can usefully be switched over to the latter is, to say the least, doubtful. Up to the present time (October 1939), the government has not made use of them, but, where it has fixed maximum prices, has acted through its own departments.

CHAPTER XI

RATIONING OF CONSUMERS

1. The idea which the term 'rationing' is most likely to call up in the ordinary mind in England is the fixing of maximum weekly rations for individual purchasers of certain foods. This type of rationing might, theoretically, be introduced without any accompanying price control, in order to conserve sufficient supplies of some important commodity for poor persons as against better-to-do persons, who would otherwise force up the price and take nearly all that there is. Of course, limitation by rationing, or in any other way, of the purchases permitted to the well-to-do will, just like a limitation of prices, indirectly cause the output of the commodity affected to fall somewhat below what it would otherwise have been. But, at all events in short periods, where diminished production is not likely to be associated with increased costs per unit, the contraction of output will be smaller than the contraction in rich people's purchases, and poor people will get more of the commodity at lower prices than would have been available for them in a completely free market. It must be remembered, however, that, since the rich are relatively few in number, and since their con-

sumption of common articles — except coal, the consumption of which is regulated by the size of a man's house and not by his bodily capacity — is a small proportion of the whole, a very large percentage cut in their *per capita* purchases would make possible only a very small percentage addition to the *per capita* consumption to the poor. Moreover, against any benefit that might be obtained through this there has to be set a large adverse balance of irritation and inconvenience, and, perhaps, of unavoidable muddling on the part of the supervising officials. The practical inference seems to be that, in the absence of a system of price control, while it may redound slightly to the general interest for well-to-do persons voluntarily to restrict their purchases of certain common articles in times of shortage, yet, in the present state of economic knowledge and administrative efficiency, it may easily do more harm than good for the State to force them to do this.

2. In fact, in the Great War, the rationing introduced in this country was designed to complement the system of maximum prices so as to prevent that system from leading to chaos in distribution. If a commodity, the price of which is restricted, is being produced under conditions of monopoly, there is indeed unlikely to be chaos in any event. For the State to enforce a maximum price less than monopoly price, but not less than the price that would allow normal profits, will not cause the quantity demanded at that price to exceed the quantity offered for sale. But, when a commodity is being produced under competitive conditions, maximum prices, if they are

to have any effect at all, must be fixed below the demand price of the quantity that is being offered for sale; otherwise, being higher than the prices that would have been charged naturally, they will be otiose. When, however, maximum prices for competitive goods are established at a level below what would rule in a free market, unless there is some system of rationing, buyers as a body will be trying to secure at that price more stuff than is available for sale. In a free market price so adjusts itself to the conditions of supply and demand that, at the price established, everybody gets exactly as much as, at that price, he wants. With the fixing of maximum prices (for competitive goods) this automatic regulation of distribution is destroyed.[1] Some people, therefore, must go short of what they want at the regulated price. Who these people will be and how short they will go depends on a mixture of accident, ability to arrive first at a place of sale and the possession or otherwise of power to influence shopkeepers. It is probable that rich people will, in practice, have an advantage over poor people, because, since they are more valuable customers, shopkeepers may be more anxious to oblige them. Realisation of this fact is naturally very irritating to poor people — more irritating than a knowledge that the rich are

[1] When a thing is produced at intervals — *e.g.* the wheat crop — for a continuous demand, maximum prices would not lead to any unsatisfied demand so long as any stock remained; but, unless a scale of ascending maxima were provided to make it worth while for sellers to hold back a part of their supplies from immediate sale, it would lead to the still worse result of complete exhaustion of the crop before next harvest.

getting the stuff, while they are not, under a régime of uncontrolled high prices — and the desire to obviate this source of irritation may play a part in deciding politicians to adopt a policy of rationing in war time. As a matter of hard fact, however, as has already been indicated, the proportion of the total supplies of any staple article of food (though, perhaps, not of household coal) that is consumed by rich people is so small that very little difference would be made to the poor if the rich were allowed to take all they required. Hence, the main objection to the system of price maxima unaccompanied by rationing is, not that it renders the fixing of maximum prices valueless to the mass of the population because the rich, through the exercise of various pulls, will sweep the market bare, but that it leaves distribution chaotic *within* the mass of the population. This chaos is, of course, tempered by unofficial rationing at the discretion of shopkeepers, who will try to keep something for all their regular customers; and, for articles of a sort that people who fail to secure supplies can fairly easily do without, perhaps chaos so tempered is a lesser evil than official rationing. A number of articles, such as cheese, fish, potatoes and eggs, were subjected during the Great War to maximum price regulation, but were not rationed. For the main staple articles of food, however — other than bread, which was subsidised and the maximum price for which did not involve a demand in excess of the supply — maximum prices by themselves led to a struggle to secure a share of the limited supplies so keen, and to suffering on the part of those who failed

so serious, that social peace was threatened. Against these evils rationing of staple foods was sought as a remedy.

3. When rationing has been decided upon, it becomes necessary to determine on what principle rations shall be allocated. A system can be imagined under which the fundamental thing aimed at should be *equality of sacrifice* among the different people whose purchases have to be cut down. This system would involve some cut in the purchases even of the very poorest people, and would leave to rich people very much larger rations than were allowed to the poor. In a democracy, in a time of stress sufficiently intense to warrant any form of rationing, this would never be tolerated. If rationing is introduced at all, it must at least *appear* to aim at a quite different fundamental end, namely, *minimum aggregate sacrifice*. This implies the allocation of rations in such a way that the last unit of commodity permitted to any one purchaser shall carry about the same satisfaction as the last permitted to any other, or, more broadly, an adjustment of rations based on *needs* rather than on demands. For some purposes objective tests of these may be resorted to. Thus, in the Great War, for coal, gas and electricity an objective test was sought in the number and size of rooms and the number of inhabitants in different people's houses. For food products rough tests of need are available in sex, age and occupation. Thus supplementary rations of some things may be allowed to soldiers, sailors, heavy workers, invalids and children. Naturally, however, considerations of simplicity and

administrative convenience point strongly towards the cruder plan of making mere existence the test and allowing equal rations to the whole civilian population. For most purposes in the Great War it was felt that this plan was, on the whole, the least unsatisfactory. Of course, it is very far from perfect. Normally, "the proportions in which families of equal means use the different 'necessaries of life' are very different. In ordinary times they distribute their expenditure among the different necessaries in the measure which seems best, some getting more bread, some more meat and milk, and so on. By equal rationing all this variety is done away with; each household is given the same amount per head of each commodity; allowances for age, sex, occupation and other things can only be introduced with difficulty."[1] In British food rationing an attempt was made to meet these difficulties by various devices, as, for example, by the granting of special rations of butter and bread to vegetarians. At best, however, the adjustments made in this way must be very rough. For certain things it may be possible to adapt rations directly to the special circumstances of separate individuals. For example, when a man wished, during the later stages of the Great War, to spend more than £500 on building or redecorating his house, or when he wished to spend anything on structural steel in house building, he had to obtain a licence. The licensing authorities were thus, in effect, allowed to assign rations of building materials and labour varying with their judgement of the needs

[1] Cannan, *Economic Journal*, December, 1917, p. 468.

of individual applicants. Plainly this plan would be administratively unworkable for the generality of ordinary commodities. Rationing, if introduced at all, must be by general rules. Such rationing is hardly practicable on a large scale except for things that people are accustomed to buy regularly and continuously, and for which enormous divergences of need do not exist. Rationing of things like pianos and bicycles, or even of suits of clothes, which people buy at irregular intervals, would be exceedingly difficult.

4. All these things being understood, let us now suppose that it has been decided to introduce a policy of uniform rations for certain articles. Plainly this policy will fail of its purpose if the rations are fixed so high that, in spite of them, there is not enough of the rationed commodity to satisfy the sum of people's demands at the fixed maximum price. For then some people must go short, and there may still be battles in queues. It follows that, where rationing is introduced in conjunction with maximum prices, the rations must be allocated with the intention of enabling all demands within the rations to be satisfied. If a mistake is made in this matter, either the ration or the level of the controlled price must forthwith be altered. No government in its senses would adopt rationing as a remedy against queues, and then frame its rationing rules in a way that prevented the supposed remedy from working. Hence, rationing other than effective rationing in this sense, though a theoretical possibility, is a practical monstrosity that is bound to be stillborn. This

implies as a corollary that, if the available supplies are, for any reason, cut down in amount, the rations permitted will have to be reduced correspondingly.

5. Now, of course, if a government chose, it could, besides fixing maximum rations, also secure that everyone should wish to buy his full ration, by providing anyone in need with money to do so. Something very like this was in fact done in the Great War, not, indeed, as between individuals, but as between States. For the United Kingdom and the United States, by providing loans for France, Italy and other Allies, made it possible for them to take up the 'rations' of imported wheat and other essential articles that were allotted to them by the various inter-allied commissions. Had it not been for these loans, certain of the rationed States could not have afforded to purchase their ration. Among individuals there is nothing to correspond to inter-allied loans, and in fact many persons, on account of poverty or competing purposes, could not afford, or, what for the present purpose is the same thing, did not choose, to take up their full quota of certain rationed articles. This circumstance complicated the administrative problem a good deal. It was known that some potential demands would not materialise; but it was not known how large in any week these would be. It was necessary, therefore, for the authorities charged with regulating distribution to see that, in each district, there were always sufficient supplies to satisfy the maximum demands within the ration limit that experience showed were at all likely to materialise. This meant that, on

some occasions in some places, the supplies were sure to exceed the ration demand. Out of this fact a difficult issue arose. It is possible (1) to maintain rigidly the rule that nobody shall be permitted to buy in any week more than his allotted ration; or (2) to allow the whole or a part of any surplus created by the failure of some persons to purchase the full amount of their ration to be sold to people anxious to buy, even though they have already a full ration. Choice has to be made between these two plans.

6. Let us begin by considering a durable article like sugar. If the supplies are sufficient to allow a total distribution throughout the country of, say, 15 million lb. per week, it is plainly better to fix the ration at such a level that, at the regulated price, the whole of these 15 million lb. will be absorbed under the rationing scheme than to fix the ration lower than this and allow the resulting surplus to be distributed outside that scheme. For any extra-ration supplies could only be distributed on a basis of accident, early inquiry or favouritism; and these are apt to be even worse regulators than a rule of uniformity. Practically the choice is between permitting surplus distribution and having a smaller ration, and forbidding such distribution and having a larger ration. Moreover, if surplus distribution is permitted, there is danger of inequality between districts. Rich people in poor districts will find themselves more liberally supplied, because there is a bigger margin of unpurchased rations allotted to the poor, than rich people in rich districts. Yet

again, there will be less inducement for producers and dealers to send stuff from districts where it is plentiful to districts where it is scarce; they may reckon to sell it as surplus in the district where it is grown and so save the trouble and cost of sending it away. The result may be that in some districts, unless the government intervenes very actively, there may not be enough supplies to satisfy demands within the ration. In principle, therefore, for durable goods no distribution of surplus outside the ration scheme should be allowed.

7. To work out this principle in practice is, however, technically rather difficult. If shopkeepers are merely required to sell no more of some article in a week than the official ration multiplied by the number of their registered customers, the supplies to be allotted to them are easily determined, and departures on their part from the law can be detected by simple methods. But, if their sales are limited to the above quantity *minus* such part of the supplies allowed to them as their customers fail to buy, mere registration of customers is no longer sufficient, and it becomes necessary to institute a system of ration books divided into coupons. The shopkeeper's permitted sales are then measured for any period by the number of coupons he has collected. To test obedience to the law it is, therefore, necessary for officials to be appointed to *count* the coupons collected by an enormous number of shopkeepers; and this is a serious undertaking. Moreover, it is bound to be very difficult to prevent coupons that one person does not use being

transferred in one way or another for the use of other people. If the coupon books are deposited with shopkeepers, they are free themselves, with the connivance of their customers, to arrange this. Alternatively, with the connivance of the shopkeeper one purchaser may give or sell some of his coupons to another purchaser. When the sense of public duty is keen, evasions of this kind will not, however, be practised extensively. Moreover, even a considerable risk of evasion may be worth accepting in preference to surrendering a sound principle. The practical inference seems to be that rationing schemes should be drawn up on a basis of absolute maxima, that some evasion of them must be expected, but that the controlling authorities, by inspection and, if need be, by prosecution, should endeavour, so far as may be, to keep this in bounds.

8. When we have to do with articles that are not durable but are liable to perish if not consumed immediately, the balance of advantage is inclined differently. For then, since it is impossible to secure that in every district every week the supplies shall exactly fit the rationed demand, if the surplus were not allowed to be sold it would be wasted. No doubt, this danger could be minimised by skilful distribution of supplies among different localities. Furthermore, when a surplus appeared in some district, it might be possible to dispose of most of it to persons who had not taken up the whole of their ration by cutting prices sharply. This device, however, would be a difficult one to apply systematically, because, so applied, it would tempt people to

hold up their demand till the last moment, so as to come in on the cut; and this would disorganise the whole system. Probably for this reason the device was not adopted in any scheme in the Great War. Instead, when perishable articles were in question, provisional, and not absolute, maxima were fixed. Thus, if their supply of meat offals or of butter were not absorbed in any week by the rationed demand, retailers were allowed to sell the surplus to people whose ration was already complete. It was the business of the central distributing authorities to see that surpluses of this sort were as small and rare as possible. It is interesting to observe that an exactly analogous problem was presented in the rationing of ship space to different sorts of articles: for to forbid ships absolutely to bring in certain relatively unimportant things might sometimes mean their return half empty, though a cargo of these things, not in any way competing with a more useful cargo, was available.

9. Hitherto, we have tacitly assumed that rationed commodities are all simple uniform things. In reality, of course, this is not so. The problem of how to treat articles of which there are various grades of quality has still to be faced. A partial solution of this problem was found by fixing the ration in terms of expenditure instead of quantity. With a simple thing, when the price is given, the choice between a quantity ration and an expenditure ration is immaterial. But, when there are several qualities, an expenditure ration enables purchases to be limited generally without dictation as to people's

choice of quality. Thus in England a ration ticket allowed the purchase of so much *value* of meat, the different joints being priced according to an official scale. Had tea been rationed, the same system would probably have been pursued. There is, however, a difficulty. If the more expensive qualities owe their greater value to their taste, so that sixpence-worth of them provides much less nourishment than sixpence-worth of the cheaper qualities, everybody may be driven to demand the cheaper varieties. When all varieties are produced by a joint process, as with meat, this will force a revision of the official prices if waste is to be avoided. Moreover, for commodities the prices of which vary with distance in time from the period of harvest, rationing by expenditure means periodic changes in the expenditure allowance if the quantity ration is to be kept constant.

10. Finally, a word should be said on an important point in the technique of administration. When a commodity which it is decided to ration is handled by private dealers inside the country, it is extraordinarily difficult to prevent these persons from exceeding their allotted ration. This difficulty was very important in Germany during the Great War. The farmers, who handled the main part of the nation's food supply, and who were very numerous, by refusing to stint themselves were free to starve the towns. So far as meat is concerned, attempts may be made to prevent evasion by rules forbidding the private slaughtering of animals, but it is easy for a farmer, if he wishes to do so, to break these

rules without being detected. When supplies are mainly imported this difficulty is relatively small. Of course, the various middlemen between importers and buyers, *e.g.* butchers, shopkeepers and millers, may take too much of the rationed article for their personal consumption, unless the government succeeds in making them account accurately for their sales. With meat, this is hardly possible, even if the government itself buys cattle from farmers and sells to butchers. But, unlike producing farmers, middlemen in meat are bound to be a small part of the whole population. Failure to keep them to their ration is, therefore, not nearly so serious a matter.

CHAPTER XII

PRIORITIES AND THE RATIONING OF FIRMS

1. The discussion of the previous chapter does not exhaust the distributional problem to which price control gives rise. So far we have considered this problem as being concerned exclusively with distribution among people:—the supply at the regulated price being insufficient to satisfy the demands of all consumers, some consumers have to have their demands cut down. This line of thought proceeds as though each consumer's demand were a single homogeneous thing. For some commodities, however, the aggregate demand of most consumers is made up of several demands directed to different uses which the commodities may be made to serve. For commodities of this sort it may be that the necessary restriction of demand can be brought about most satisfactorily by regulating distribution among uses instead of, or as well as, distribution among people irrespective of uses. Naturally this form of regulation is more readily applicable to simple materials that are capable of being devoted to a number of different ends than to highly specialised finished goods.

2. As between different uses open to materials

the war-time regulations can, of course, only be based on some rough criterion of relative national importance. The simplest way to work this criterion is, when a material is short, to forbid altogether its employment in certain uses that are clearly unimportant. Examples of this kind of regulation in the Great War were :

(1) The prohibition of the use of petrol for pleasure-touring :

(2) The prohibition of the use of paper for newspaper contents bills and, under certain conditions, traders' circulars, and the abolition of 'returns' :

(3) The prohibition by the Timber Supplies Department against packing various articles in wooden cases and crates :

(4) The prohibition of the use of electricity for lighting shop fronts, and the order restricting the hours during which hotel and restaurant dining-rooms might use artificial light or theatres might remain open.

These simple prohibitions accomplished something. But, when the volume of supply or the requirements of the government and different sorts of non-government uses were liable to vary, the mere prohibition of particular uses was not adequate. Resort was had to a system of priority among uses. A scale of Priority Certificates was instituted, which only permitted sales to would-be buyers with certificates of lower urgency after those with certificates of higher urgency had been satisfied. Work for government had the first grade of certificate, work of special national importance (*e.g.* export

work, deemed valuable for protecting the foreign exchanges) the next, and so on in successive stages. Iron and steel products were dealt with on this plan, and quarry stone and other road material on less elaborate, but substantially equivalent, lines. So also were imported flax and leather and a number of metals. Whatever the precise plan followed, the essence of it is the construction of a scale of urgency amongst uses, the less urgent being sacrificed to the more urgent. This system is obviously preferable to chaos, but it is open to a serious objection. The intention is to withdraw such supplies as have to be withdrawn from the least urgent uses, leaving more urgent uses with access to them. But, in fact, there is no such thing as urgency of use in an abstract general way without reference to the quantity of different people's holdings. The first unit devoted by anybody to a comparatively non-essential use will often serve a more urgent need than the last devoted to a comparatively essential one. Everybody would agree that water is much more urgently wanted for drinking than for washing. But to prohibit a man from using any water at all for washing while allowing him an ample supply for drinking would probably have bad results: he would prefer to do some washing even though, in consequence, he had rather less to drink. It follows that the system of cutting off certain uses is wasteful of satisfaction. Some of the waste may, however, be obviated if departures from the general rule are permitted in special circumstances under licence; and, in any event, the sum total of waste may well

be less than it would be if the system of regulation disregarded differences of urgency among uses altogether.

3. It should be added that there may be great administrative difficulty in preventing people from using things nominally bought for one purpose for another purpose. Thus a housewife, who is granted so much sugar for jam-making and chooses to use a part of it for ordinary consumption, is not easily detected or punished. When, however, as was usual in the Great War, regulations are operated through producers instead of being applied directly to consumers, *e.g.* when bakers are forbidden to use wheat, flour or sugar in making confectionery, or builders to use steel in building houses, they are more easily enforcible.

4. When distribution among uses has been regulated, there still remains, for materials that have to undergo a process of manufacture, the problem of regulating distribution among the firms that wish to work them up. With restricted prices, if nothing were done, this distribution also would be chaotic, depending on accident, good fortune or favouritism. To this government regulation will often be preferable. Regulation implies, however, the choice of some criterion in accordance with which regulation shall be worked. The British Government during the Great War adopted the criterion of pre-war purchases. The use of this criterion is illustrated by the rules of the Cotton Control Board (1918) limiting the proportion of machinery that any firm might keep at work on American cotton, and by the con-

dition imposed on importers by the Paper Control, that they should supply their customers (*i.e.* manufacturers) in the same proportions as in 1916–17. In highly organised trades like the cotton industry there was no technical difficulty in applying regulations on these lines, but in many of the metal trades a special organisation had to be created for the purpose. It is clear that this basis of allocation could not be employed in connection with any policy designed to last for more than a short period. For an arrangement, which tended to maintain the various firms engaged in an industry always in the same relative position as they occupied in an arbitrarily chosen year, would constitute a quite intolerable obstacle to efficiency and progress. But for regulation designed to be temporary, it was reasonably satisfactory.

CHAPTER XIII

BOUNTIES

1. It will be remembered that in the course of Chapter X a distinction was drawn between what I called cancelling bounties and normal bounties. Something remains to be said about bounties from a different angle. There are two principal occasions for them. First, certain 'short' commodities are largely imported from abroad. The price of these things, as from the foreign sellers, cannot be controlled by legislation in the importing country; for attempts to control it would merely lead those sellers to send their stuff to other markets. Hence, high prices of these things cannot be prevented by mere decree. Secondly, for certain things produced at home, conditions may become such that very high prices are necessary even to yield ordinary profit without any 'profiteering'. These high prices cannot be cut down by decree without causing supply to fall off very seriously. It may happen, however, that things in one or other of these two classes — in the United Kingdom wheat is an example of the first class, potatoes of the second — are largely consumed by very poor people, and that high charges for them would lead to an amount of discontent that

governments in war time dare not face. In these circumstances it is open to the State to lower prices to consumers by itself paying part of the price asked for by producers. It can do this either by buying up the product from producers and reselling it at a loss to consumers or by offering a bounty of so much per unit sold in the country. Whichever of these things it does, it is, in effect, giving a present proportioned to purchases to the consumers of the bounty-fed article. Obviously, no government will choose for this kind of treatment any commodities except such as are largely consumed by very poor persons.

2. Apart from the possibility that in war time the provision of funds for these bounties may be indirectly responsible for some small extra creation of bank credits, whereas in normal times they will come out of taxes, a policy of subsidies on poor men's goods is economically no different as a war-time measure from what it is as a peace-time measure. The advantages and disadvantages attaching to it may, therefore, be considered in a quite general way. The bounties may take either of two forms: first, bounties on the whole consumption of particular commodities which are predominantly purchased by poor persons; *secondly*, bounties confined to that part of the whole consumption which is actually enjoyed by defined categories of poor persons. The first of these methods is illustrated by the special subsidies which were paid on bread and potatoes during the Great War to enable prices to be kept down to what was considered a 'reasonable' level;

the second by the various arrangements which have been made since 1918 for subsidising the building, not of all houses, but only of houses for the poor.[1] I propose to compare these two methods, first, with one another, and, secondly, with grants to poor persons made directly instead of on their purchases of particular commodities.

3. A bounty limited to that part of the output of anything that is actually bought by poor persons has the advantage over a general bounty that it saves transferring purchasing power in the first instance from better-to-do people to the State and then back again to these better-to-do people on their purchases. This is the same advantage that a system of old age pensions confined to poor persons has over universal old age pensions. On the other hand, limited bounties have the disadvantage that under them the charity element is more obvious; and the further disadvantage that, unless the line between potential beneficiaries and others is skilfully drawn, some people may be inclined voluntarily to relax their productive efforts in order to qualify for inclusion in the category of poor persons. Moreover, when it is a question of giving a bounty in respect of purchases of any ordinary article of merchandise, as distinguished from such personal goods as houses, education and insurance, it is practically very difficult to confine the bounty to one set of buyers only; for, if this were done, the privileged buyers would find a profit in setting up as middlemen on behalf of others.

4. We have next to compare a bounty on a par-

ticular article, whether universal or confined to the purchases of the poor, with more direct forms of help to the poor. If the amount of the bounty-fed commodity which each recipient is to consume is fixed authoritatively, as under the British system of free and compulsory education, a gift of so much money's worth in payment for the bounty-fed commodity has the same effect as an equal gift made directly. The same thing is true if the amount of the commodity which anybody purchases is not fixed authoritatively, but is, for some other reason, not liable to change in consequence of the bounty. Thus, poor people are accustomed to buy some things through a common purchase fund, so organised that the payment a member has to make does not vary with the amount of his individual purchases. Sick clubs used to be arranged on this plan. A person does not want medical attendance unless he is ill, and there is no inducement to a member of such a club to increase the amount of the doctor's services that he calls for in a year merely because the fixed amount that he has been accustomed to pay for membership of the club is taken over and paid by the State. These conditions, however, are exceptional. In general, when a bounty, or the equivalent of a bounty, is given on any commodity, the beneficiaries of the bounty will buy more of it than they would have done had they received an equal amount of money and were free to spend it as they chose. In this way resources are diverted out of the natural channels of production, and there is a presumption that this diversion will involve a waste of economic

resources and a loss of satisfaction on the whole. This presumption is not, however, absolute. The bounty method may still sometimes be better, not only because there may be special economic or non-economic reasons for encouraging the consumption of the particular thing on which the bounty is given, but also because the element of "charity" is less obvious and, therefore, less damaging to the *morale* of the beneficiaries, when it is concealed in a bounty than when it is displayed in a direct dole.

CHAPTER XIV

CONTROL OF IMPORTS AND FOREIGN INVESTMENTS

1. CONTROL of imports and foreign investments is sometimes thought of as a remedy or palliative for adverse foreign exchange rates, designed to make these rates more favourable. This is an inadequate view. It confuses a symptom, which usually, though not necessarily, accompanies a particular malady, with the malady itself. This malady is inability to finance the purchase of, and so to obtain, certain vitally necessary things from abroad. It is easily illustrated from the experience of this country during the Great War. Prior to 1914 the United Kingdom was accustomed to import large quantities of food and raw material and to pay for them out of her claims for interest upon loans formerly made by her citizens to foreigners and out of the proceeds of the sale of current exports of coal, manufactured articles and shipping and banking services. As a result of the war our need for imports, particularly of munitions and food, both for our own use and for the use of our Allies, enormously increased; while the amount of labour and capital available for making exports to pay for these things diminished. It is true that the gap thus made between our requirements

and our means of payment was partly filled by the use of that portion of our claims to interest which we were formerly accustomed to devote to capital investments abroad. But, even so, it was extremely difficult for us to find means of paying for the enormous extra purchases which we desired to make. This was our position during a great part of the war period, as it has been the position of more than one country suffering from grave dearth of food and raw materials in more recent years. The fundamental problem is to find some way of financing the importation of vitally necessary foreign supplies. This problem can be solved either by obtaining command over sufficient foreign purchasing power to satisfy all our needs or by conserving such foreign purchasing power as we do obtain command over to finance these things.

2. The means available for obtaining command over foreign purchasing power are: (1) the export of goods and securities; (2) the sale of securities, gold or other marketable property abroad; (3) borrowing abroad through ordinary loans; and (4) the sale abroad, presumably to foreign speculators, of national paper money. In the urgency of war it may well be impracticable for manufacturers to send abroad export goods in anything like adequate quantities, and the supply of securities or other property saleable to foreigners may not be large enough to fill the gap. Moreover, individual foreigners will not make loans, and foreign speculators will not buy the paper money of countries in need, beyond a strictly limited amount. The result-

ing difficulty may, however, be got over with the help of foreign government loans. In the period following the entry of the United States into the war down to the Armistice it was, in fact, got over in this way. The United States Government provided sufficient credits to enable the Allied nations to finance their essential foreign purchases. The immense help that it in this way gave to the Allied cause is, perhaps, inadequately appreciated by general European opinion.

3. As an incidental and secondary consequence of American action, the 'symptom' of adverse foreign exchange was covered up. Under arrangement with the United States the British Government was free to borrow dollars to a practically unlimited extent. On the strength of this it deliberately 'pegged' the American exchange by offering dollars to any British traders who had need of them at the rate of 4·76 dollars to the £. Clearly, with an indefinite supply of dollars available at this rate, nobody would buy at any worse rate. The pegging of sterling in the close neighbourhood of pre-war parity was, thus, rigid and complete; and a similar, though less fully effective, policy was adopted on behalf of the franc and lira exchanges. The position thus brought about was peculiar, because, in view of the large rise in European prices relatively to American prices, there is reason to believe that the purchasing power parity between British (and still more French and Italian) currency and American currency would have been represented by a figure substantially below that at which the exchanges were

actually 'pegged'. The pegging, therefore, involved a lapse from economic equilibrium. It discouraged European exports to America and offered an opportunity for abnormal profit to American traders who were able to sell goods in England, France or Italy. The reason, of course, was that the relative price levels and the exchange rates taken in combination made the number of dollars realisable by such traders from a sale in Europe greater than the number realisable from the same sale in the United States. The lapse from economic equilibrium was able to continue because the restrictions on importation imposed by European governments in consequence of the shortage of transport rendered it impossible for private traders to take advantage, to more than a very small extent, of the opportunities for profit open to them by selling American goods on private account in Europe. The external prices, that is, the prices in foreign markets, of goods sold to Frenchmen, when translated into francs, were abnormally low relatively to French internal prices; but Frenchmen could not in practice buy things at these external prices, and so the influences, which ordinarily would have prevented them from remaining abnormally low, were unable to operate. Consequently, the peculiar relations, which existed between relative price levels, trade conditions and rates of exchange till early in 1919, were able to maintain themselves in spite of their paradoxical character.

4. So long as America was prepared to provide dollars on loan to an indefinite extent, the Allies

were safeguarded against a failure to obtain essential foreign goods on account of inability to pay for them. In these circumstances it might be thought at first sight that everything was satisfactory and that there could be no need for any government interference with normal trading conditions. This, however, is a false inference. Though, with freedom to borrow indefinitely, wasteful use of foreign purchasing power could not have prevented us from getting essential imports, wasteful use was still very undesirable. For the funds, with which any use that could have been cut off was financed, were, in effect, borrowed on behalf of its citizens by the British Government, and thus were obtained at the cost of piling up a burden of foreign national debt against the future. This source of embarrassment it was clearly undesirable to submit to without compelling reason. Consequently, even when foreign government credits were freely obtainable, it was still in the national interest to prevent private people from employing any foreign purchasing power, of which they might obtain control, for other than really important ends.

5. When foreign government credits are not freely obtainable the case for doing this is evidently much stronger. For then the penalty for wasting such foreign purchasing power as a country has is no longer merely that its government will have to contract a bigger foreign debt, but that it may be unable to finance, and so to obtain, goods that are required to satisfy absolutely vital needs. In this matter our position to-day is much weaker than it was in the later stages of the Great War, since the

United States is not an Ally. It is weaker even than it was before America had declared war on Germany. For American Neutrality Legislation may well make the marketing of securities in New York very difficult. Canada, indeed, has agreed, when the need arises, to make loans of Canadian dollars to the British Government. But, valuable as this help will be, the resources of Canada are not comparable with those of the United States. The American dollar exchange has, indeed, been pegged in the neighbourhood of 4 dollars to the £ by the Bank of England undertaking to sell dollars against sterling at that rate. Presently, perhaps, the peg may be put higher. But it is not certain, as it would have been had the United States been an Ally, that we shall not, before the war is over, be forced to put it lower.

6. The period of the Great War and the immediately succeeding years, as also the period following on the great depression, afforded many illustrations of attempts on the part of governments to conserve for the purchase of essential foreign goods such foreign purchasing power as they and their citizens succeeded in acquiring. These attempts have proceeded by way of prohibition or restriction of (1) the importation of relatively unessential goods and (2) the investment of capital abroad. The first branch of this policy, which, during the war period itself, the grave shortage of shipping space must have forced us to adopt apart altogether from financial considerations, is comparatively simple. There is, indeed, the difficulty already referred to in another

connection in Chapter III, that the first £1000 worth of one thing normally classed as a luxury may really be more urgently needed than the 100th £1000 worth of another thing normally classed as a necessary. This sort of consideration precludes us from drawing a sharp line between some things which may, and other things which may not, be imported. But the difficulty can be got over well enough by a system of restriction and licences, under which the importation of different things is limited in different degrees. The second branch of the policy, *i.e.* the prohibition of investment abroad, presents a more complex administrative problem. If the men of money are prepared loyally to support their government, it may be sufficient simply to prohibit the taking up of new foreign issues and the purchase of securities, whether domestic or foreign, from non-resident foreigners. This was all that was done in the United Kingdom during the Great War. But later experience in certain European countries proved that this arrangement is not water-tight. It does not prevent an exporter of goods or of securities from leaving the proceeds of his sale on deposit in foreign banks or diverting them to the purchase of foreign capital in foreign markets over which no control can be exercised. It has, therefore, been found necessary in some countries to make permission to export goods conditional upon the exporter either himself undertaking to use the foreign exchange, to which the exports give him a title, in purchasing goods for importation, or upon his selling the foreign exchange to some form of

official exchange institution, which, in its turn, only sells it to people who wish to pay for imported goods. How far regulations of this type will need to be developed in this country during the present war, experience alone can show.

EPILOGUE

In the book which I published in 1921 a study not greatly differing from what has been set down here was followed by chapters on the Aftermath — the aftermath of the war as regards currency, national debt and government control. After peace had come, when the 'war to end war' was over, that discussion was in place. But now, at the beginning of our struggle — a struggle which may wreck the world — it is not in place. We are at a start of a journey whose end we cannot foresee. Yet once again the young and gallant, our children and our friends, go down into the pit that others have digged for them. Yet once again men of greater age, we that, if it might be, would so gladly give for theirs our withered lives, we cumber the earth in vain. We wait and watch and — those who can — we pray. As an economist I have not the power, nor, as a man, the heart, to strain through a night so black to a dawn I shall not see.

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